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## APPENDIX C: AIRPORT LAYOUTS FOR THE TOP 100 AIRPORTS

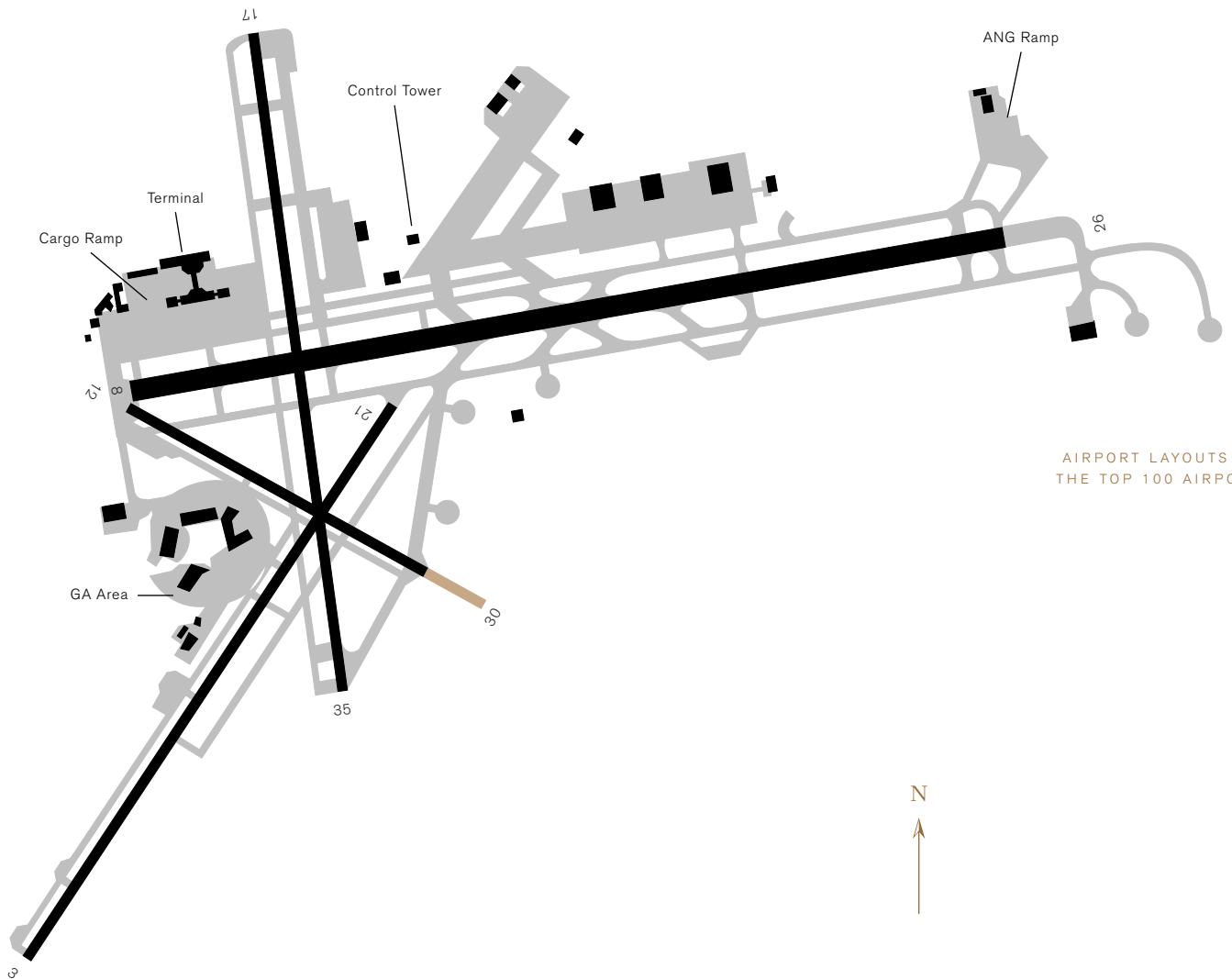
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This appendix contains current airport diagrams for the top 100 airports. For those airports that are considering or have plans for the construction of new runways or extensions to existing runways, the diagrams show the proposed runway and runway extension projects indicated in brown. These diagrams are for illustration only, and should not be used in any way for airport planning purposes. Accompanying the diagrams is a brief narrative of construction projects being planned or considered.

<b>ABQ</b>	Albuquerque International Airport . . . . .	C-3
<b>ALB</b>	Albany County . . . . .	C-4
<b>ANC</b>	Anchorage International . . . . .	C-5
<b>ATL</b>	Hartsfield Atlanta International . . . . .	C-6
<b>AUS</b>	Austin-Bergstrom International . . . . .	C-7
<b>BDL</b>	Bradley International . . . . .	C-8
<b>BHM</b>	Birmingham . . . . .	C-9
<b>BNA</b>	Nashville International . . . . .	C-10
<b>BOI</b>	Boise Air Terminal . . . . .	C-11
<b>BOS</b>	Boston Logan International . . . . .	C-12
<b>BUF</b>	Greater Buffalo International . . . . .	C-13
<b>BUR</b>	Burbank-Glendale-Pasadena . . . . .	C-14
<b>BWI</b>	Baltimore-Washington International . . . . .	C-15
<b>CHS</b>	Charleston AFB International . . . . .	C-16
<b>CLE</b>	Cleveland Hopkins International . . . . .	C-17
<b>CLT</b>	Charlotte/Douglas International . . . . .	C-18
<b>CMH</b>	Port Columbus International . . . . .	C-19
<b>COS</b>	Colorado Springs Municipal . . . . .	C-20
<b>CVG</b>	Greater Cincinnati International . . . . .	C-21
<b>DAL</b>	Dallas-Love Field . . . . .	C-22
<b>DAY</b>	Dayton International . . . . .	C-23
<b>DCA</b>	Ronald Reagan National . . . . .	C-24
<b>DEN</b>	Denver International . . . . .	C-25
<b>DFW</b>	Dallas-Fort Worth International . . . . .	C-26
<b>DSM</b>	Des Moines International . . . . .	C-27
<b>DTW</b>	Detroit Metropolitan Wayne County . . . . .	C-28
<b>ELP</b>	El Paso International . . . . .	C-29
<b>EWR</b>	Newark International . . . . .	C-30
<b>FLL</b>	Fort Lauderdale-Hollywood International . . . . .	C-31
<b>GEG</b>	Spokane International . . . . .	C-32
<b>GRR</b>	Grand Rapids Kent County International . . . . .	C-33
<b>GSO</b>	Greensboro Piedmont Triad International . . . . .	C-34
<b>GSP</b>	Greer Greenville-Spartanburg . . . . .	C-35
<b>HNL</b>	Honolulu International . . . . .	C-36
<b>HOU</b>	Houston William P. Hobby . . . . .	C-37
<b>IAD</b>	Washington Dulles International . . . . .	C-38
<b>IAH</b>	George Bush Intercontinental Airport/Houston . . . . .	C-39
<b>ICT</b>	Wichita Mid-Continent . . . . .	C-40
<b>IND</b>	Indianapolis International . . . . .	C-41
<b>ITO</b>	Hilo International . . . . .	C-42
<b>JAN</b>	Jackson International . . . . .	C-43
<b>JAX</b>	Jacksonville International . . . . .	C-44
<b>JFK</b>	New York John F. Kennedy International . . . . .	C-45
<b>KOA</b>	Kona International at Keahole . . . . .	C-46
<b>LAS</b>	Las Vegas McCarran International . . . . .	C-47
<b>LAX</b>	Los Angeles International . . . . .	C-48
<b>LBB</b>	Lubbock International . . . . .	C-49
<b>LGA</b>	New York LaGuardia . . . . .	C-50
<b>LIT</b>	Little Rock Adams Field . . . . .	C-51
<b>MCI</b>	Kansas City International . . . . .	C-52
<b>MCO</b>	Orlando International . . . . .	C-53
<b>MDT</b>	Harrisburg International . . . . .	C-54
<b>MDW</b>	Chicago Midway . . . . .	C-55
<b>MEM</b>	Memphis International . . . . .	C-56
<b>MHT</b>	Manchester . . . . .	C-57
<b>MIA</b>	Miami International . . . . .	C-58
<b>MKE</b>	Milwaukee General Mitchell International . . . . .	C-59
<b>MSN</b>	Madison/Dane County Regional . . . . .	C-60
<b>MSP</b>	Minneapolis-St. Paul International . . . . .	C-61
<b>MSY</b>	New Orleans International . . . . .	C-62
<b>OAK</b>	Metropolitan Oakland International . . . . .	C-63
<b>OGG</b>	Kahului . . . . .	C-64
<b>OKC</b>	Oklahoma City Will Rogers World . . . . .	C-65
<b>OMA</b>	Omaha Eppley Airfield . . . . .	C-66
<b>ONT</b>	Ontario International . . . . .	C-67
<b>ORD</b>	Chicago O'Hare International . . . . .	C-68
<b>ORF</b>	Norfolk International . . . . .	C-69
<b>PBI</b>	Palm Beach International . . . . .	C-70
<b>PDX</b>	Portland International . . . . .	C-71
<b>PHL</b>	Philadelphia International . . . . .	C-72
<b>PHX</b>	Phoenix Sky Harbor International . . . . .	C-73
<b>PIT</b>	Greater Pittsburgh International . . . . .	C-74
<b>PNS</b>	Pensacola Regional . . . . .	C-75
<b>PSP</b>	Palm Springs Regional . . . . .	C-76
<b>PVD</b>	Providence Theodore Francis Green State . . . . .	C-77
<b>PWM</b>	Portland International Jetport . . . . .	C-78
<b>RDU</b>	Raleigh-Durham International . . . . .	C-79
<b>RIC</b>	Richmond International . . . . .	C-80
<b>RNO</b>	Reno Tahoe International . . . . .	C-81
<b>ROC</b>	Greater Rochester International . . . . .	C-82
<b>RSW</b>	Fort Myers Southwest Florida Regional . . . . .	C-83
<b>SAN</b>	San Diego International Lindbergh Field . . . . .	C-84
<b>SAT</b>	San Antonio International . . . . .	C-85
<b>SAV</b>	Savannah International . . . . .	C-86
<b>SDF</b>	Louisville International . . . . .	C-87
<b>SEA</b>	Seattle-Tacoma International . . . . .	C-88
<b>SFB</b>	Orlando-Sanford . . . . .	C-89
<b>SFO</b>	San Francisco International . . . . .	C-90
<b>SJC</b>	San Jose International . . . . .	C-91
<b>SJU</b>	San Juan Luis Muñoz Marín International . . . . .	C-92
<b>SLC</b>	Salt Lake City International . . . . .	C-93
<b>SMF</b>	Sacramento International . . . . .	C-94
<b>SNA</b>	John Wayne Airport-Orange County . . . . .	C-95
<b>SRQ</b>	Sarasota Bradenton . . . . .	C-96
<b>STL</b>	Lambert St. Louis International . . . . .	C-97
<b>SYR</b>	Syracuse Hancock International . . . . .	C-98
<b>TPA</b>	Tampa International . . . . .	C-99
<b>TUL</b>	Tulsa International . . . . .	C-100
<b>TUS</b>	Tucson International . . . . .	C-101
<b>TYS</b>	Knoxville McGhee-Tyson . . . . .	C-102

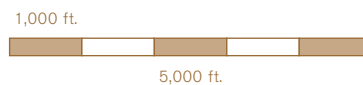
## ABQ — ALBUQUERQUE INTERNATIONAL AIRPORT

A 1,000 ft. extension to Runway 12/30 is in progress. It is expected to be operational in 2000, at an estimated cost of \$14 million.



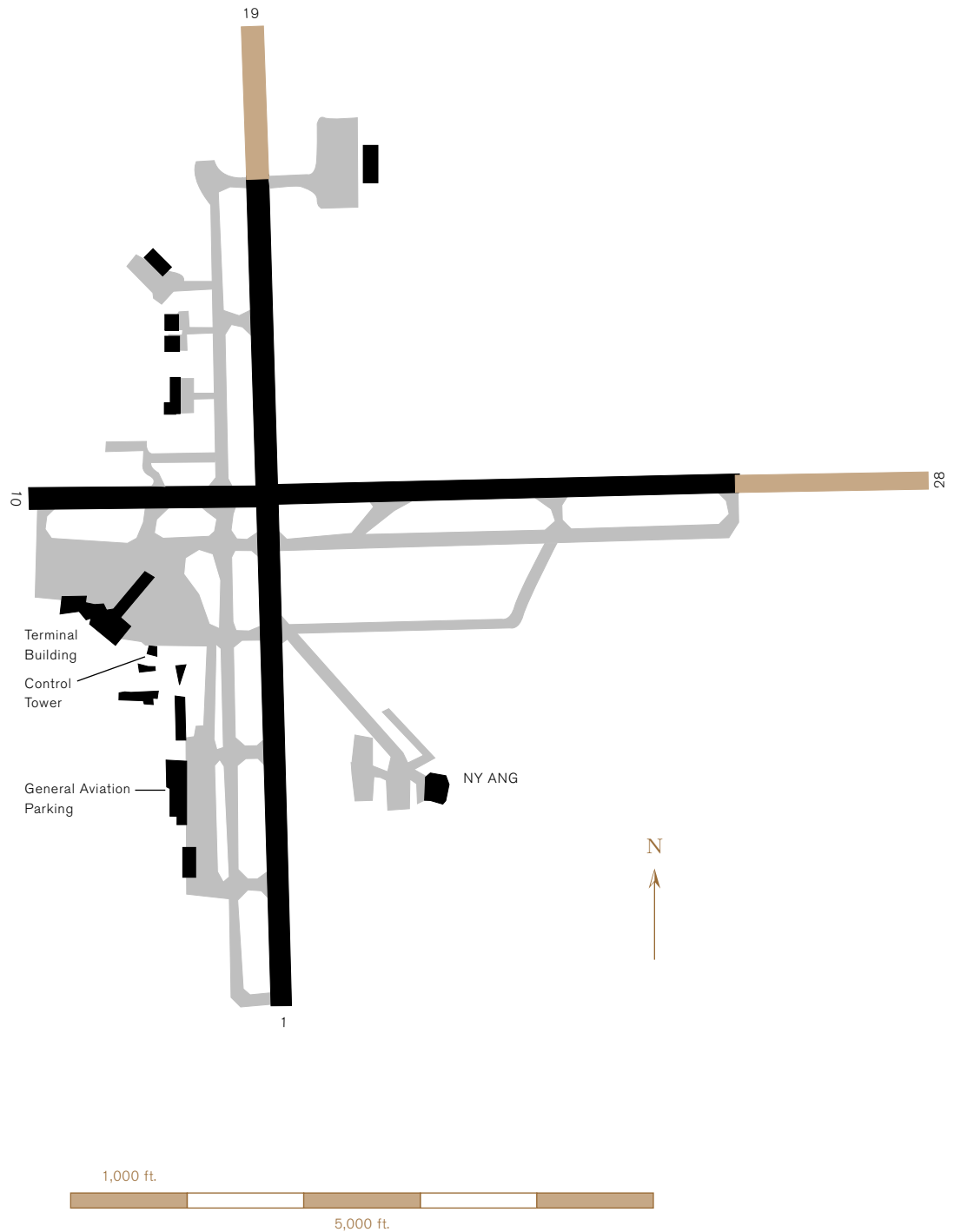
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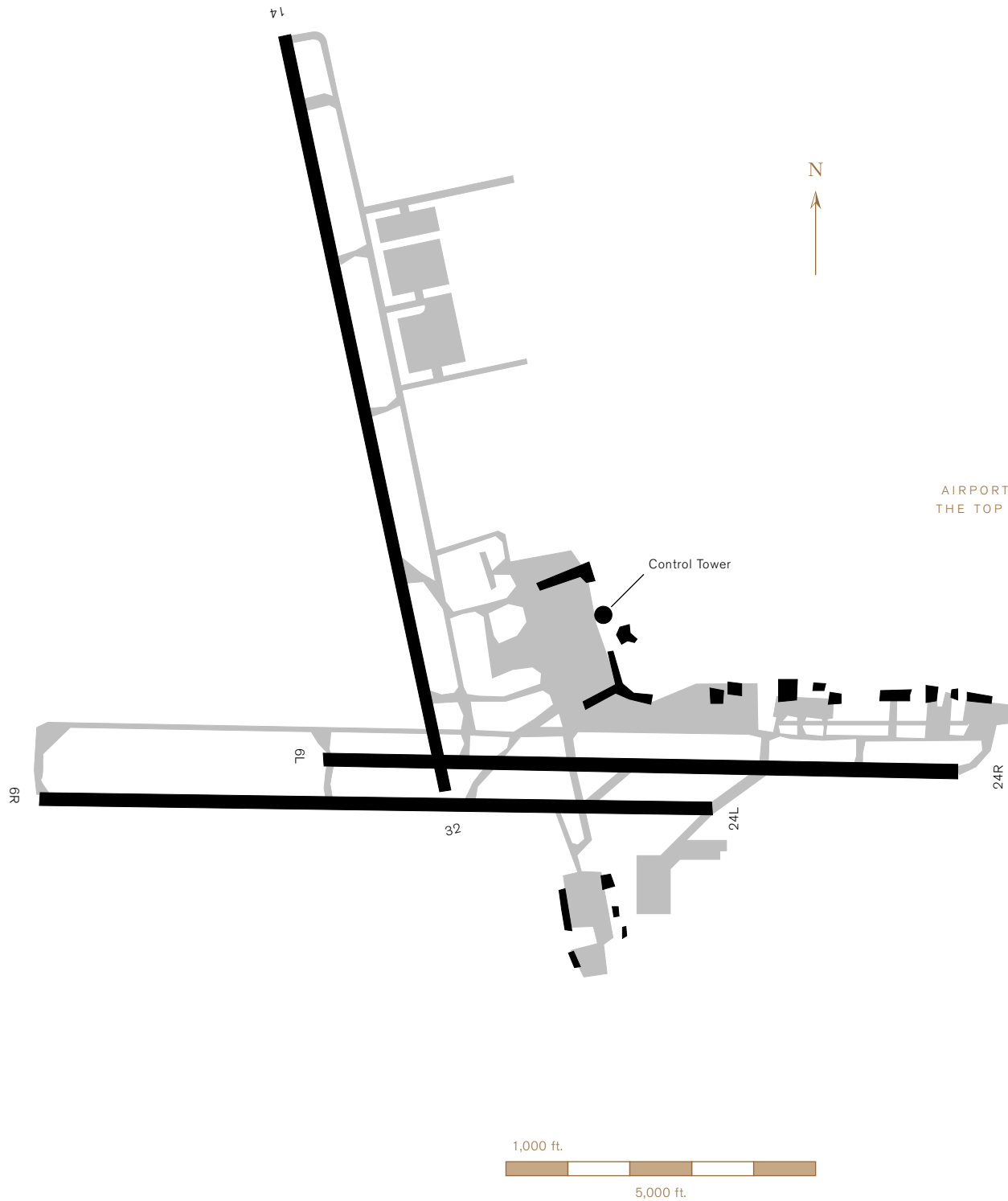
## ALB — ALBANY COUNTY AIRPORT

Construction of an extension to Runway 10/28 is planned. The estimated cost of construction is \$5.8 million and is expected to be operational in 2000. An extension of Runway 1/19 is planned at an estimated cost of \$7.5 million. Completion is expected in 2005.



## ANC — ANCHORAGE INTERNATIONAL AIRPORT

There are no new runway or runway extension projects planned, proposed, or currently under construction at this airport.

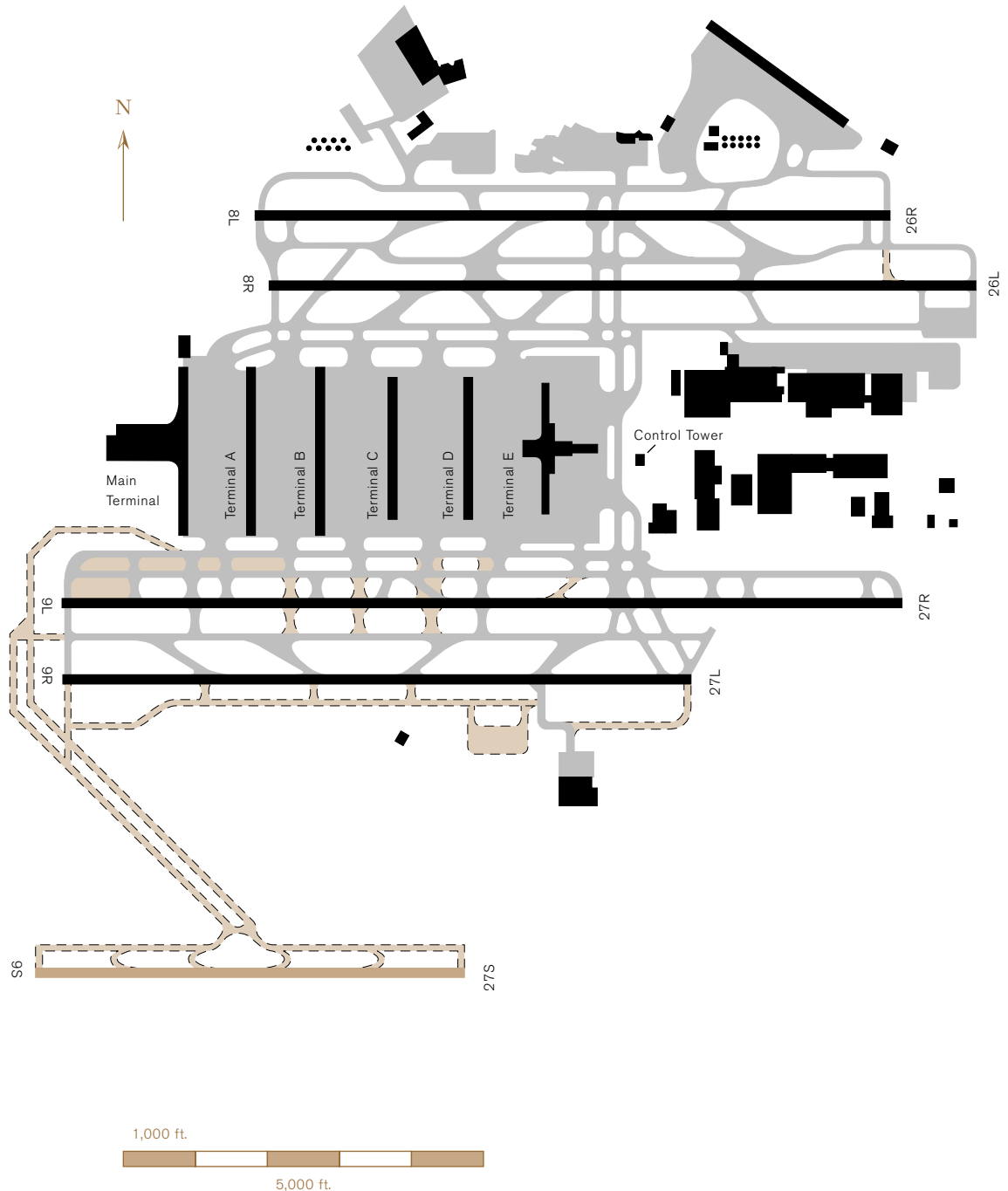


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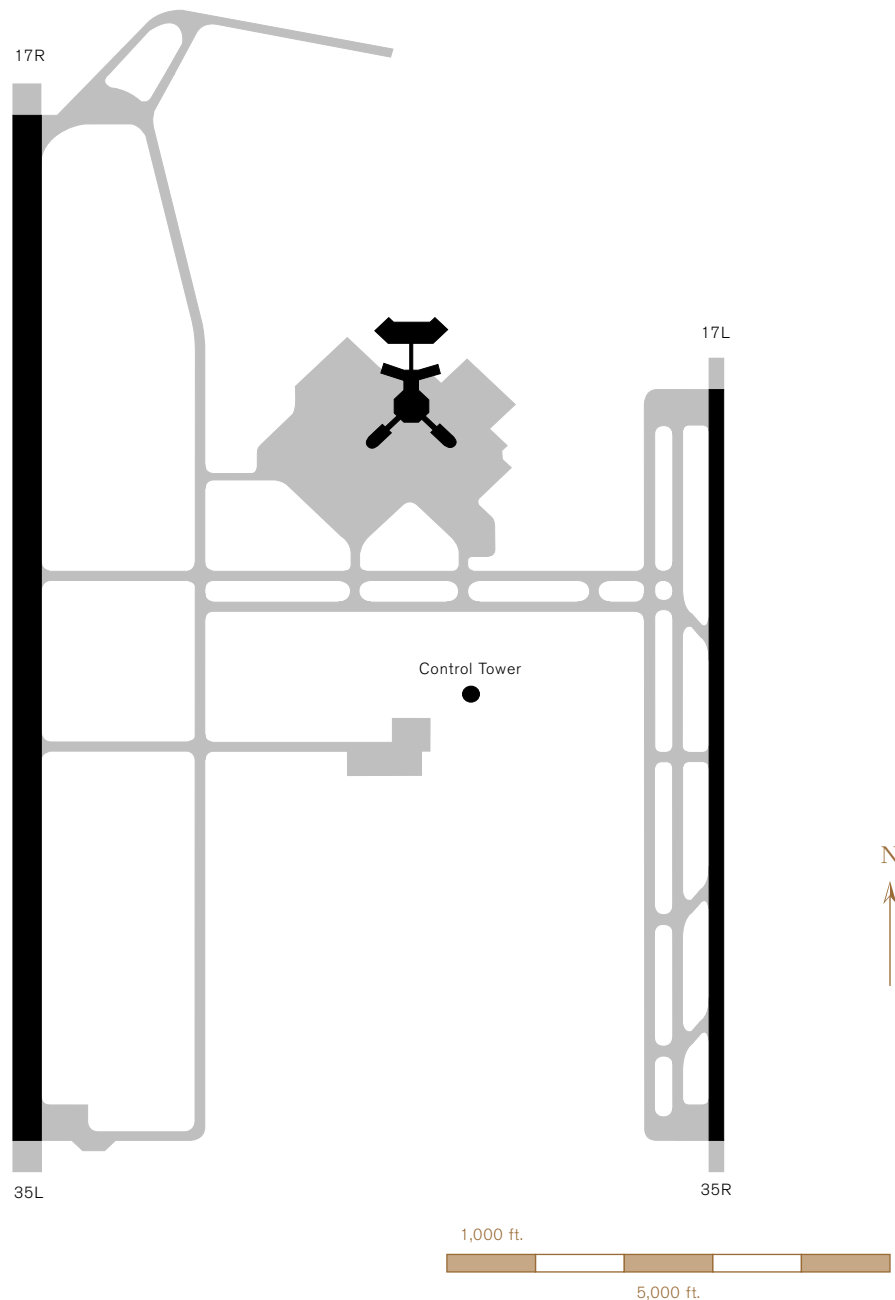
## ATL — HARTSFIELD ATLANTA INTERNATIONAL AIRPORT

A fifth parallel commuter Runway 9S/27S, 6,000 ft. long and approximately 4,200 ft. south of Runway 9R/27L, is under design. Land acquisition is ongoing. The runway will permit triple independent IFR approaches using the PRM. The total estimated cost is \$450 million. Construction is expected to begin in 2000. The estimated operational date is early 2004. The new runway will be used primarily for arrivals by commuter aircraft. An Environmental Impact Statement is underway for a possible extension of the new runway to 9,000 feet.



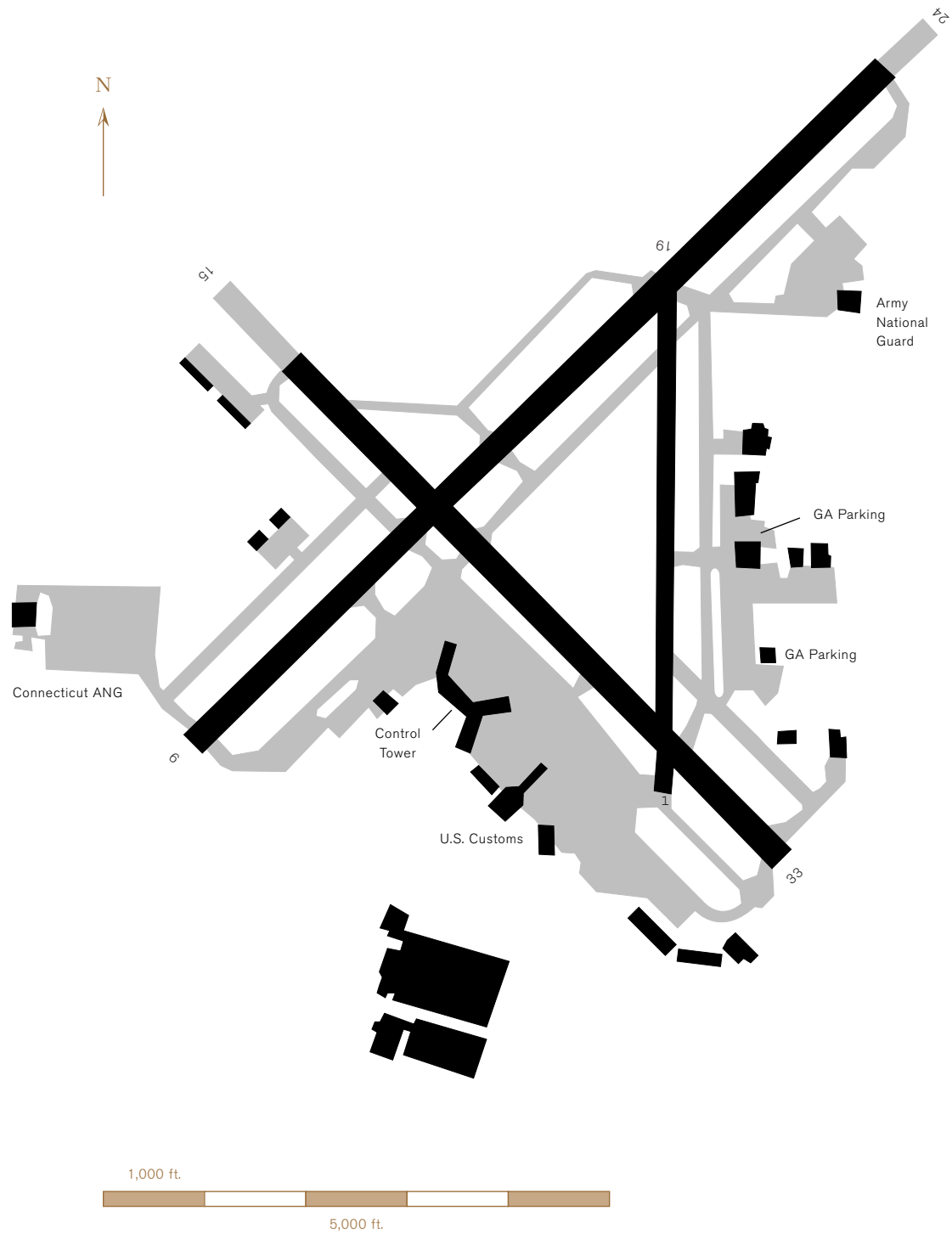
## AUS — AUSTIN-BERGSTROM INTERNATIONAL AIRPORT

The community approved and sold approximately \$400 million of revenue bonds supporting the redevelopment of the former Bergstrom Air Force base into Austin-Bergstrom International Airport; a replacement airport for the current Robert Mueller Municipal Airport. Austin-Bergstrom International Airport opened for air cargo operations on June 30, 1997, and opened for air passenger and general aviation operations on May 23, 1999. The new facilities include a recently completed new 9,000 ft. x 150 ft. Runway 17R/35L, as well as associated taxiways, air cargo, air passenger, and general aviation aprons. The airport also has a new 25-gate air passenger terminal and support facility. Robert Mueller Municipal closed at completion of the new airport. The total estimated project cost was \$690 million.



**BDL – BRADLEY INTERNATIONAL AIRPORT**

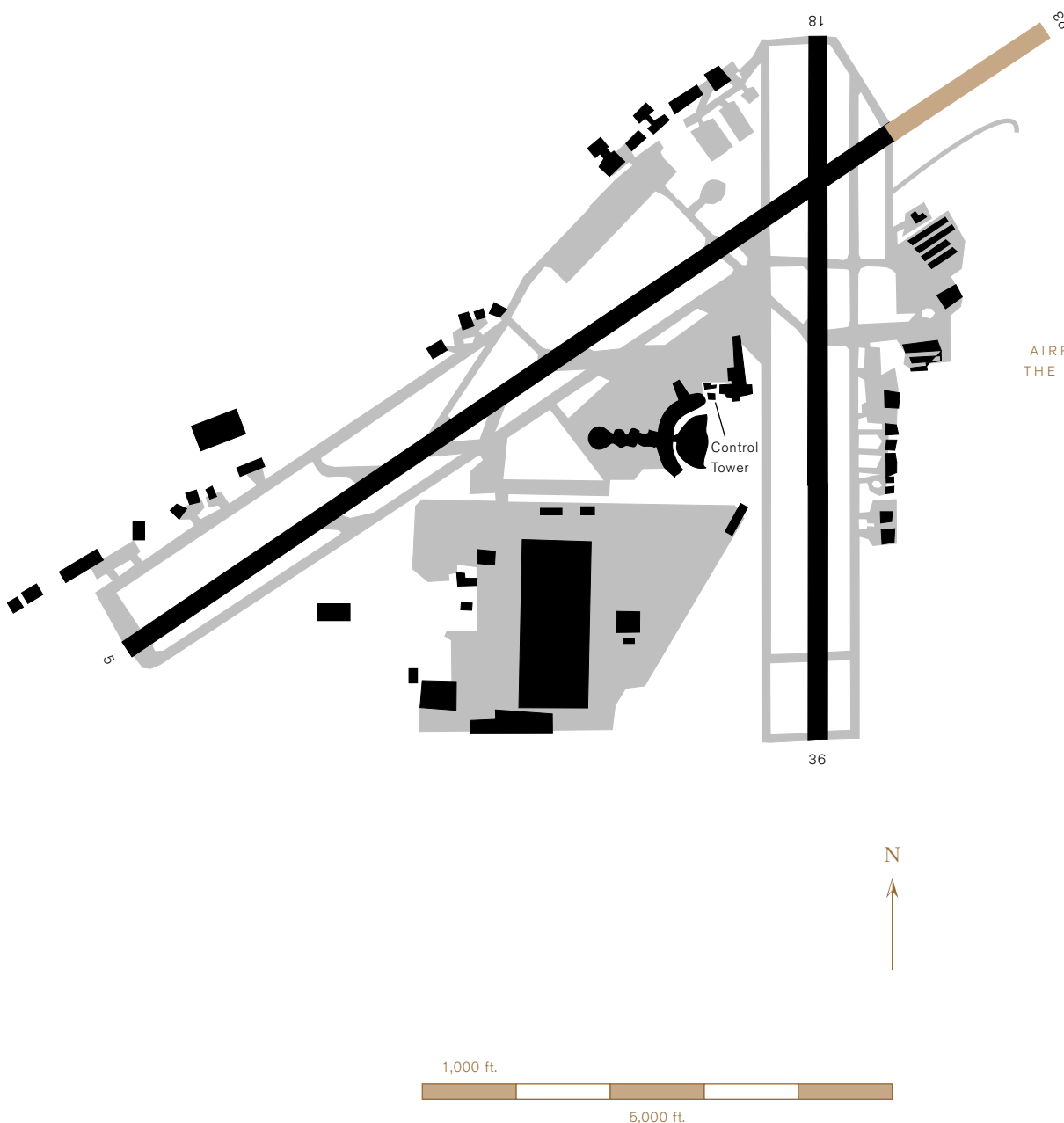
There are no new runway or runway extension projects planned, proposed, or currently under construction at this airport.





## BHM — BIRMINGHAM AIRPORT

A 2,000-ft. extension of Runway 5/23 is currently proposed in the Airport's Master Plan. As proposed, the Runway 23 threshold would be displaced by 2,000 ft. Therefore, Runway 23's length available for departures and arrivals would be 12,000 ft. and 10,000 ft., respectively. Runway 5's available length for both arrivals and departures would increase to 12,000 ft. The increased length will allow increased aircraft payloads. An environmental assessment for the runway extension is expected to be complete by late-1999. The runway extension is planned to be complete by 2002. The total estimated cost is \$17 million.

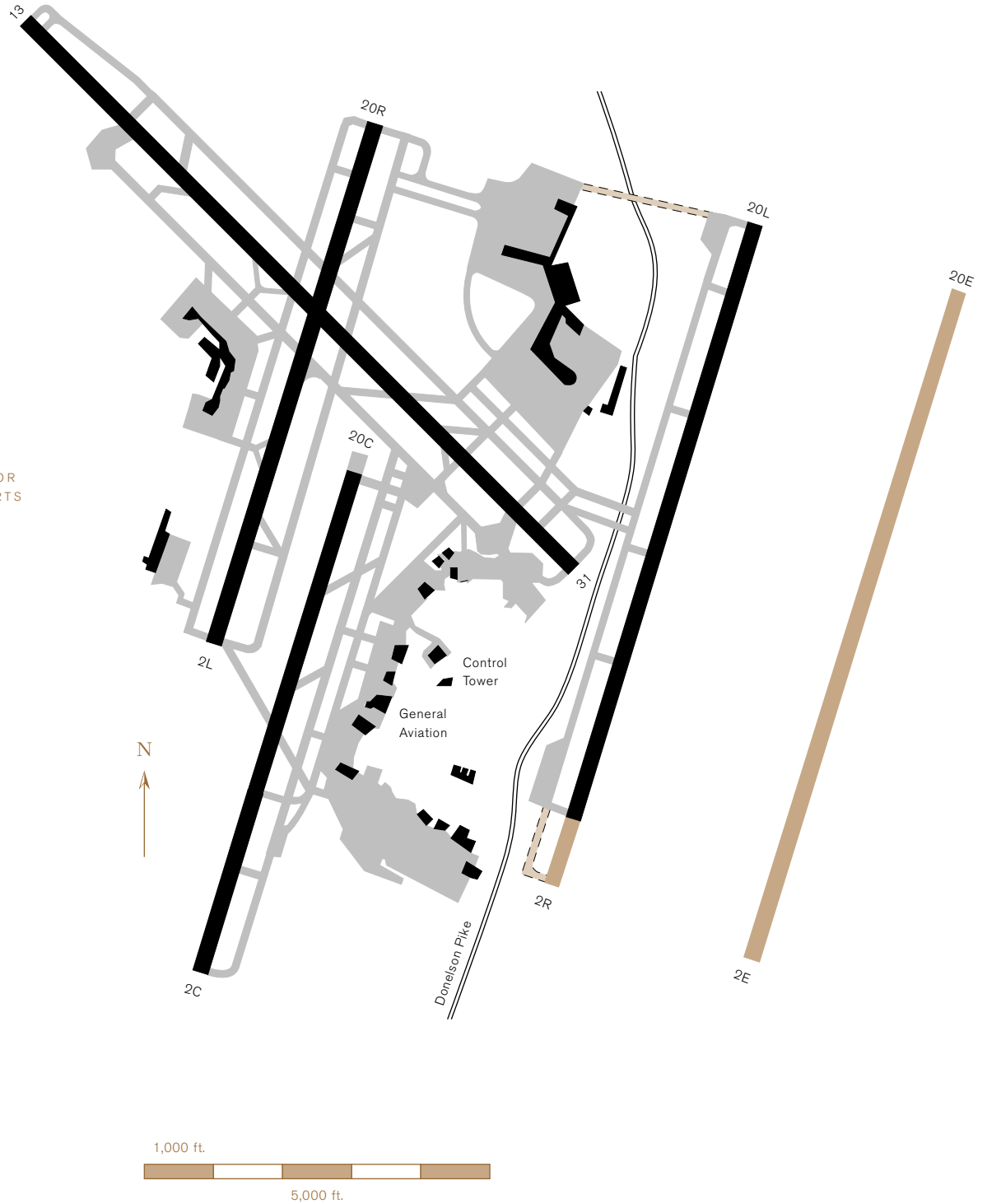


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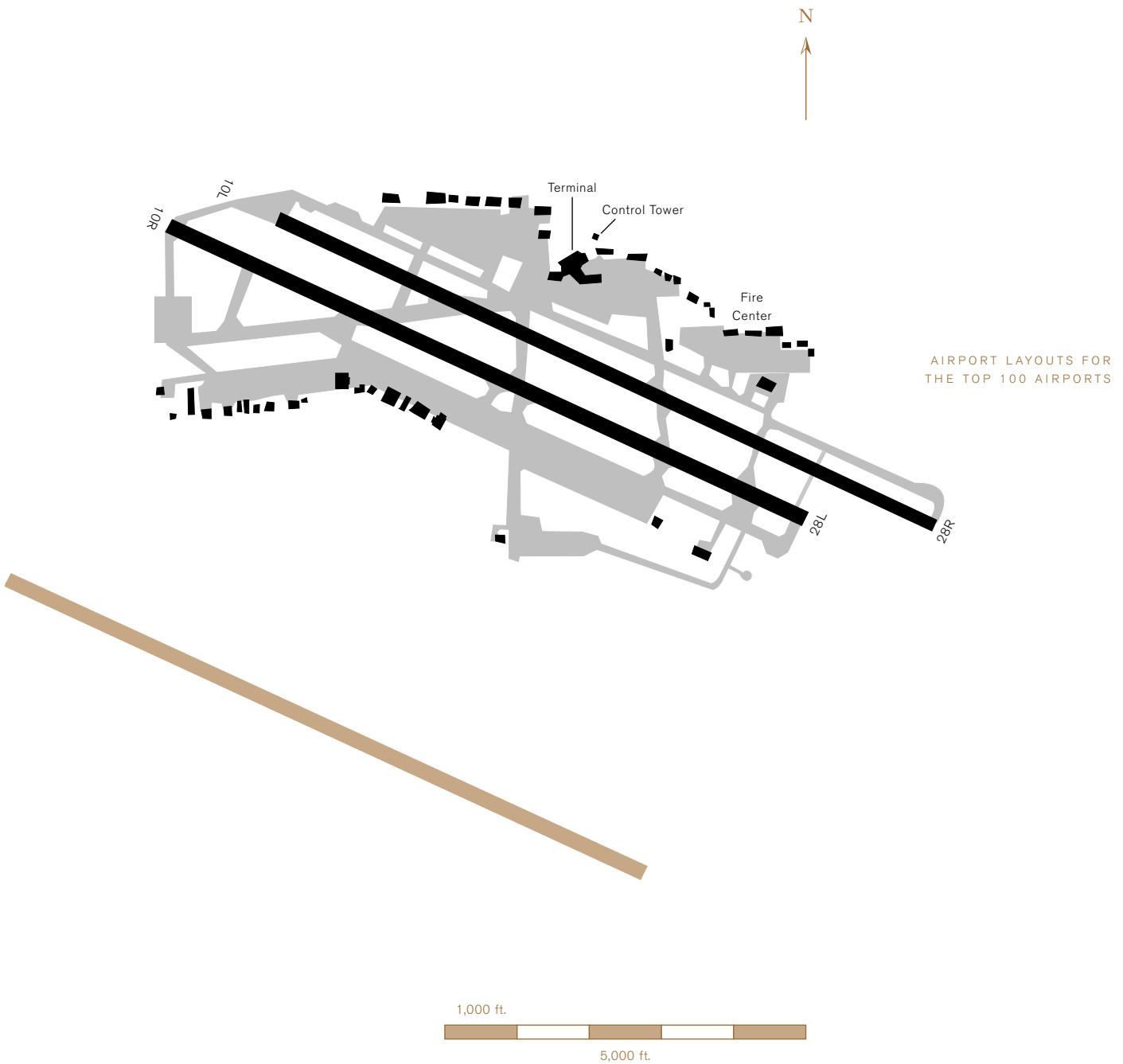
## BNA — NASHVILLE INTERNATIONAL AIRPORT

A new Runway 2E/20E is planned for the future between 1,500 and 3,500 ft. from Runway 2R/20L. In addition, an extension to Runway 2R/20L is planned.



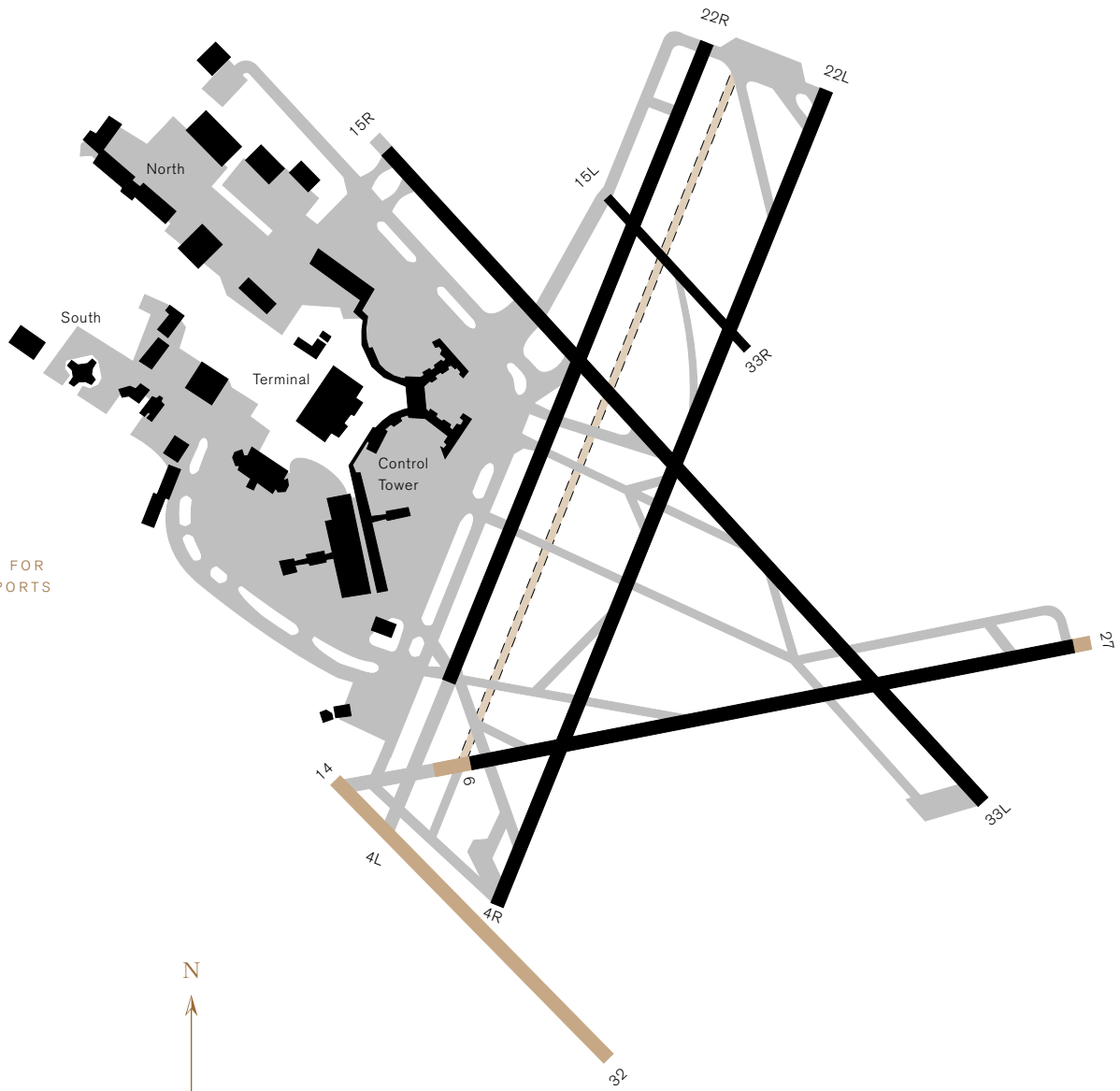
## BOI — BOISE AIR TERMINAL

A third parallel Runway 10R/28L is planned for the long-term future. It is planned 5,400 ft. south of existing Runway 10R/28L (to be renamed 10C/28C).



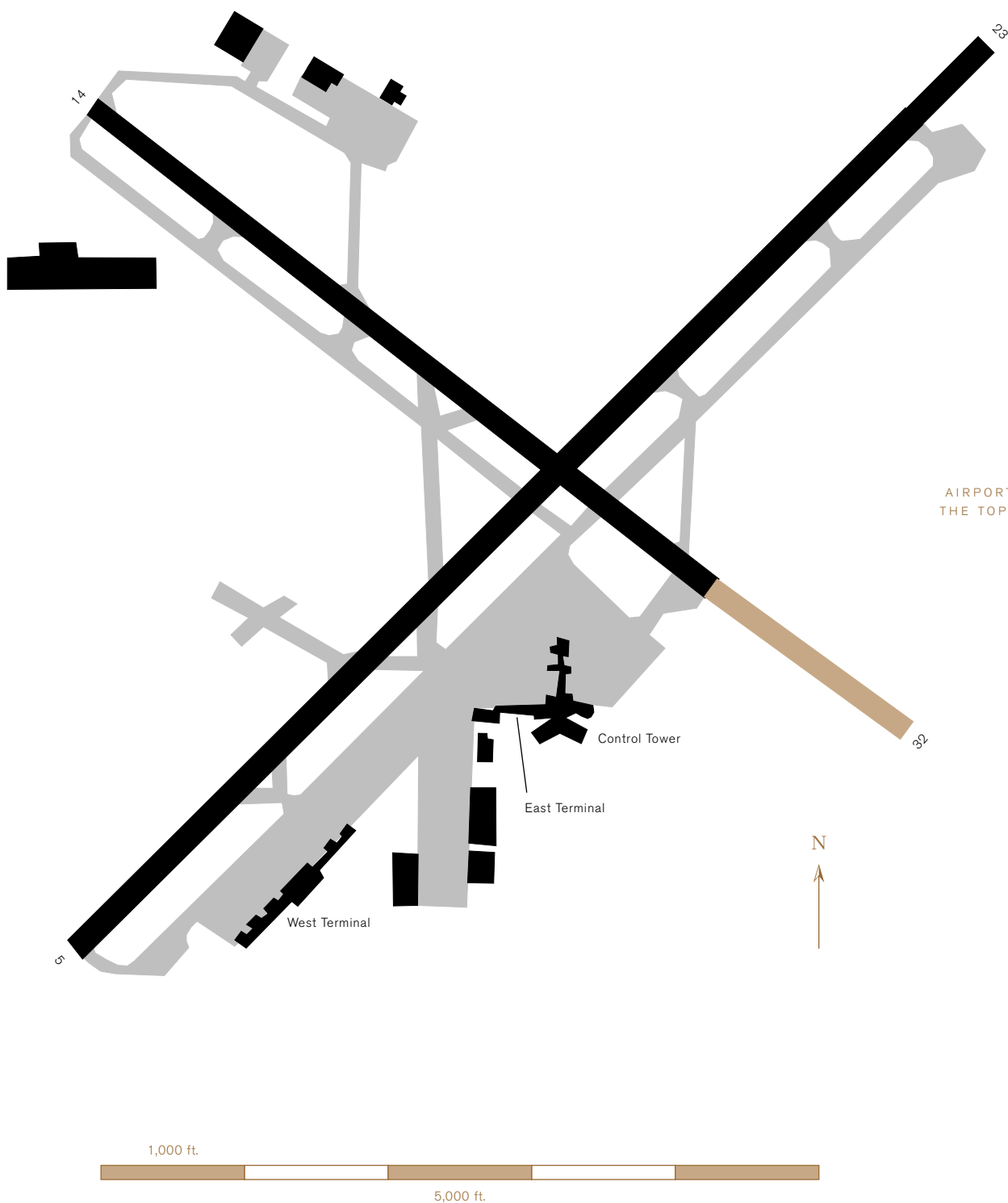
## BOS — BOSTON LOGAN INTERNATIONAL AIRPORT

A new uni-directional commuter Runway 14/32, 4,300 ft. from Runway 15R/33L, and a 400 ft. extension of Runway 9/27 are being studied. An Environmental Impact Study is currently in progress for the new runway. The estimated cost of construction is \$50 million and is expected to be completed in 2003.



## BUF — GREATER BUFFALO INTERNATIONAL AIRPORT

Construction of an extension to Runway 14/32 is planned. Estimated cost of construction is \$4.9 million and it is expected to be completed in 2005.



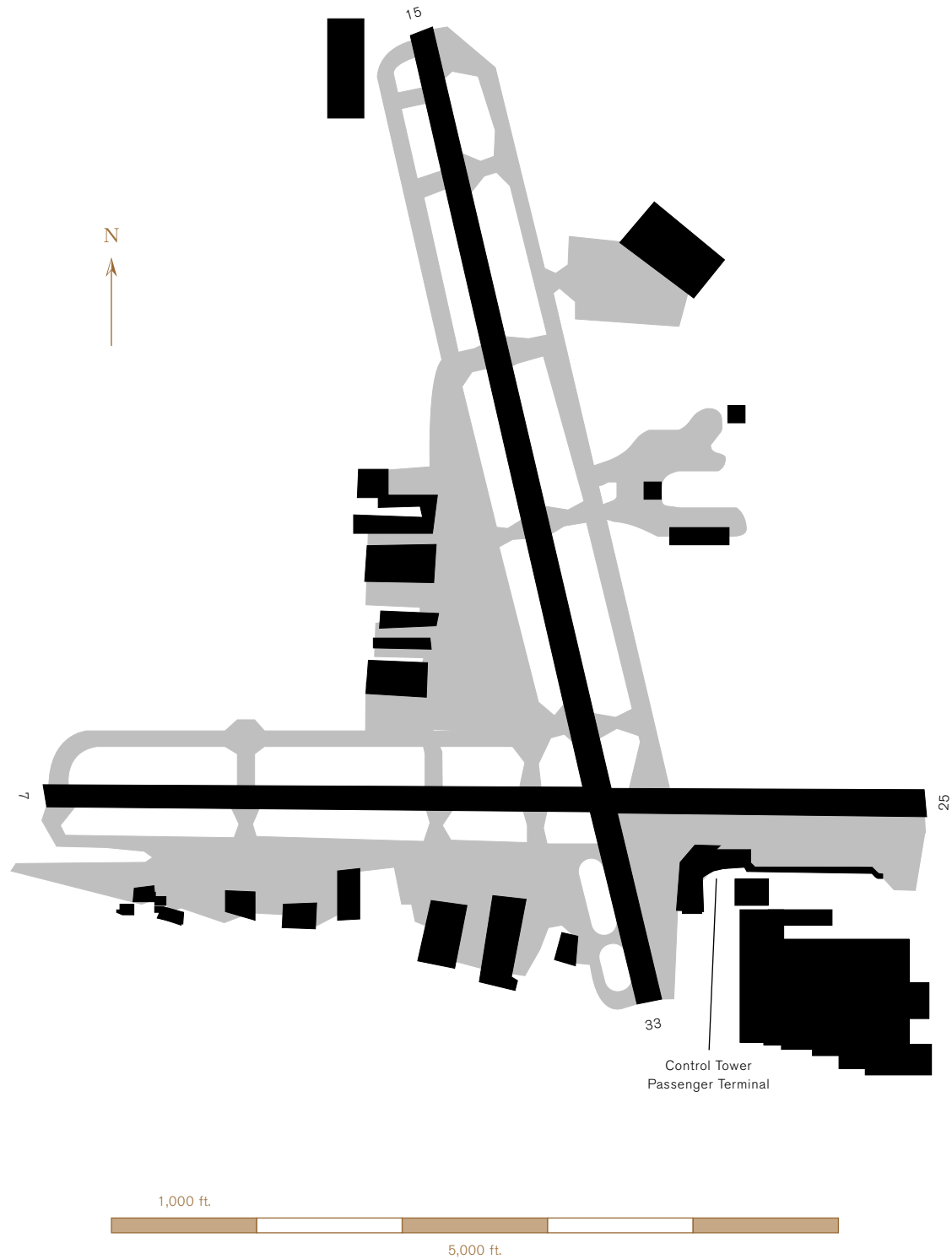
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**BUR — BURBANK-GLENDALE-PASADENA AIRPORT**

There are no new runway or runway extension projects planned, proposed, or currently under construction at this airport.

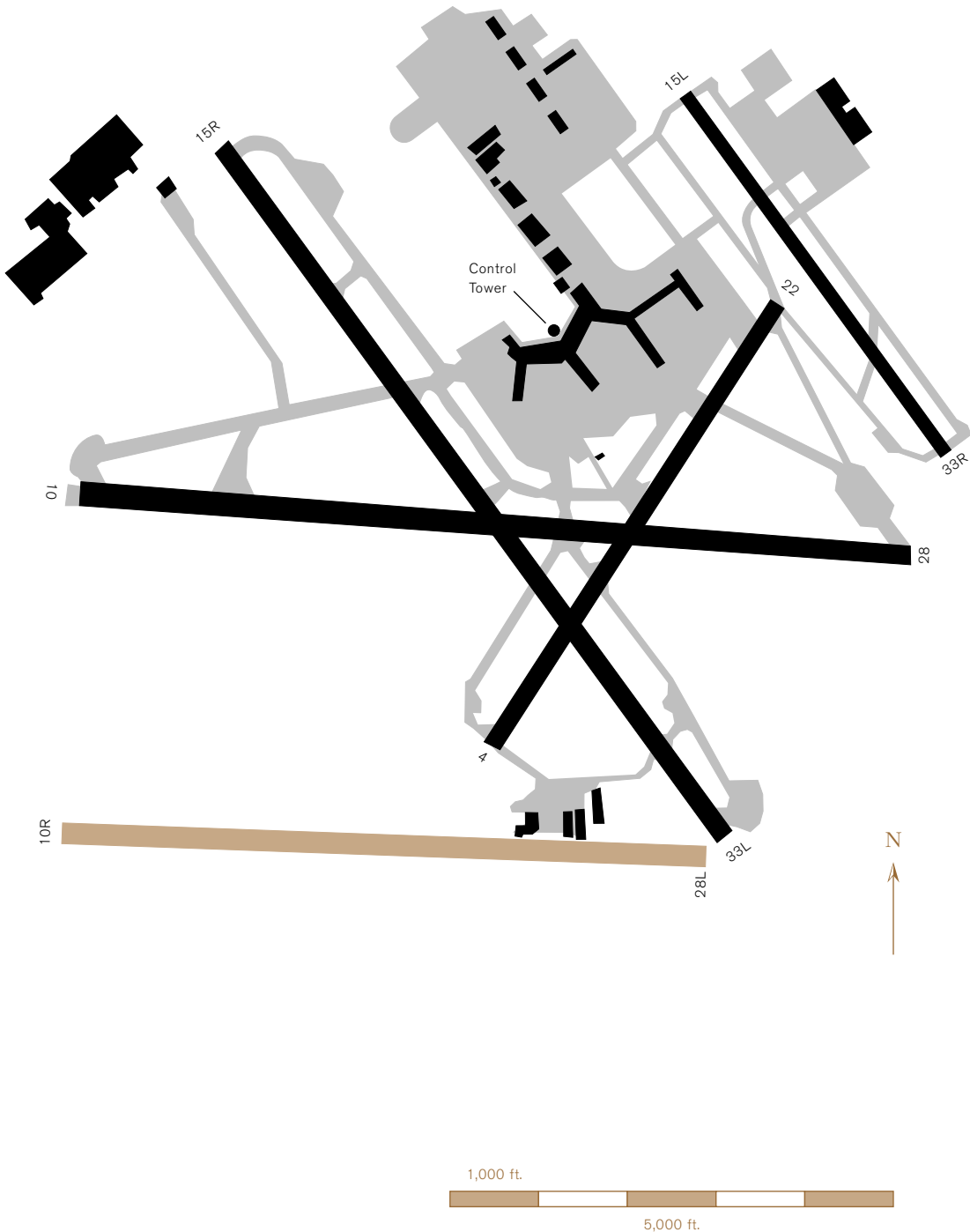
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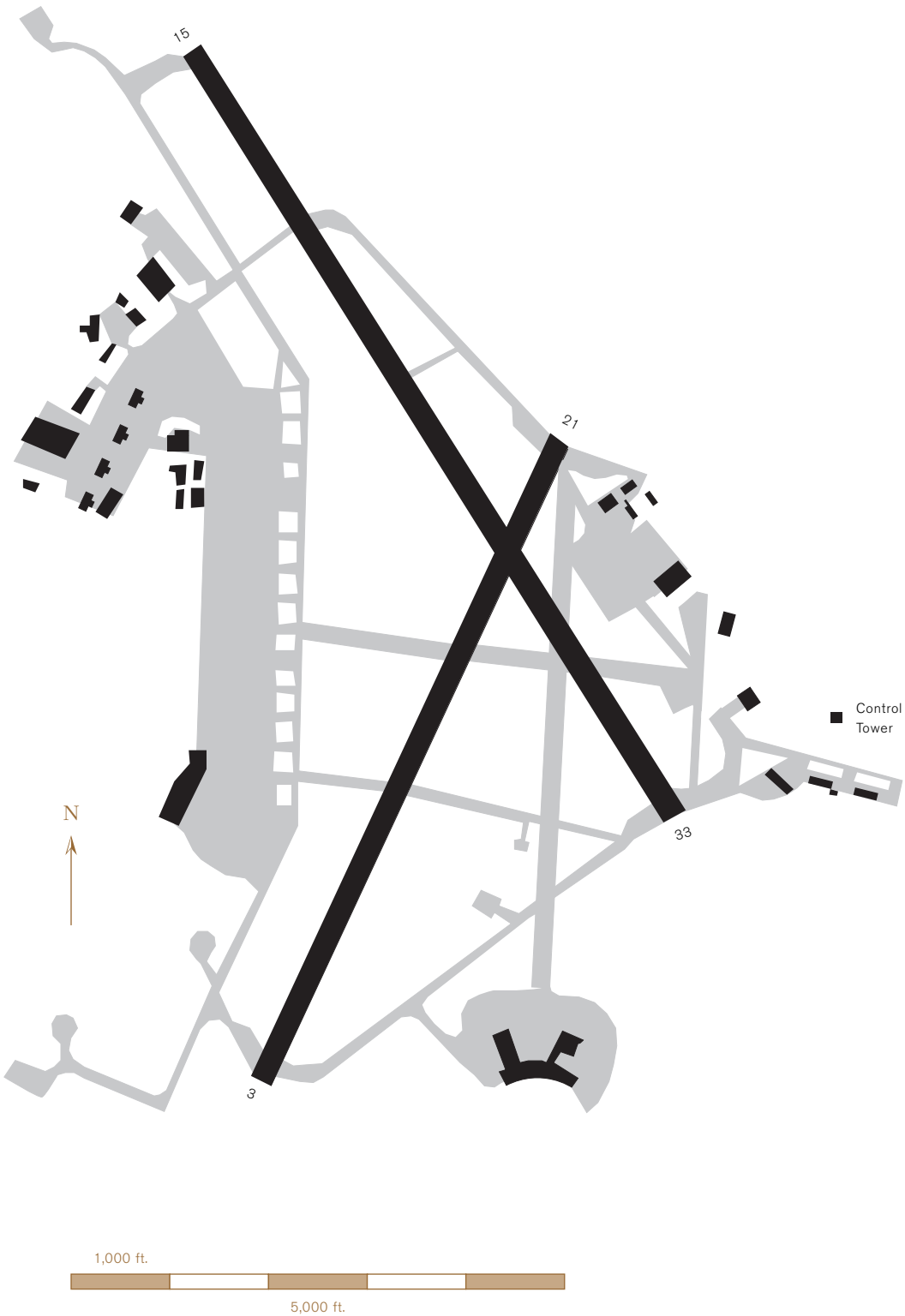
## BWI — BALTIMORE-WASHINGTON INTERNATIONAL AIRPORT

A new 7,800 ft. Runway 10R/28L, is planned to be constructed by 2008, 3,500 ft. south of Runway 10/28. When Runway 10R/28L is constructed, Runway 4/22 will be converted to a taxiway. Estimated cost of construction is \$150 million.



**CHS – CHARLESTON AFB INTERNATIONAL AIRPORT**

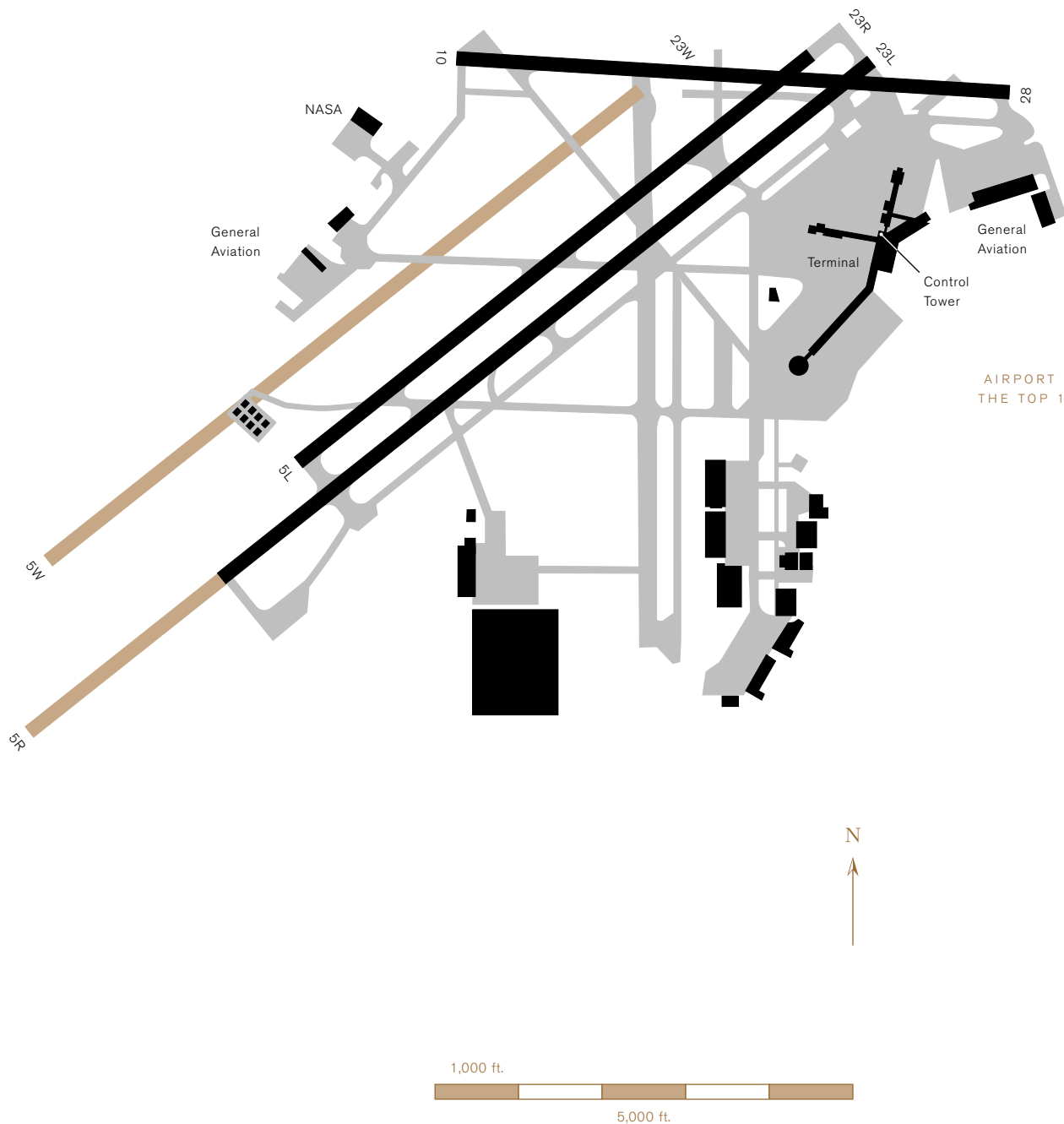
There are no new runway or runway extension projects planned, proposed, or currently under construction at this airport.





## CLE — CLEVELAND HOPKINS INTERNATIONAL AIRPORT

The Master Plan Update, Phase 1, is conditionally approved. The Airport Layout Plan shows construction of a new Runway 5W/23W that would be 9,000 ft. long and 150 ft. wide. Construction is expected to be completed in 2002 at a cost of \$467 million. Also included in the development plan is an extension of the existing Runway 5R/23L from 9,000 ft. to 11,250 ft. at an estimated cost of \$40 million, and conversion of the existing Runway 5L/23R to a parallel taxiway at a cost of \$3 million. All of this work is scheduled for completion by 2005.

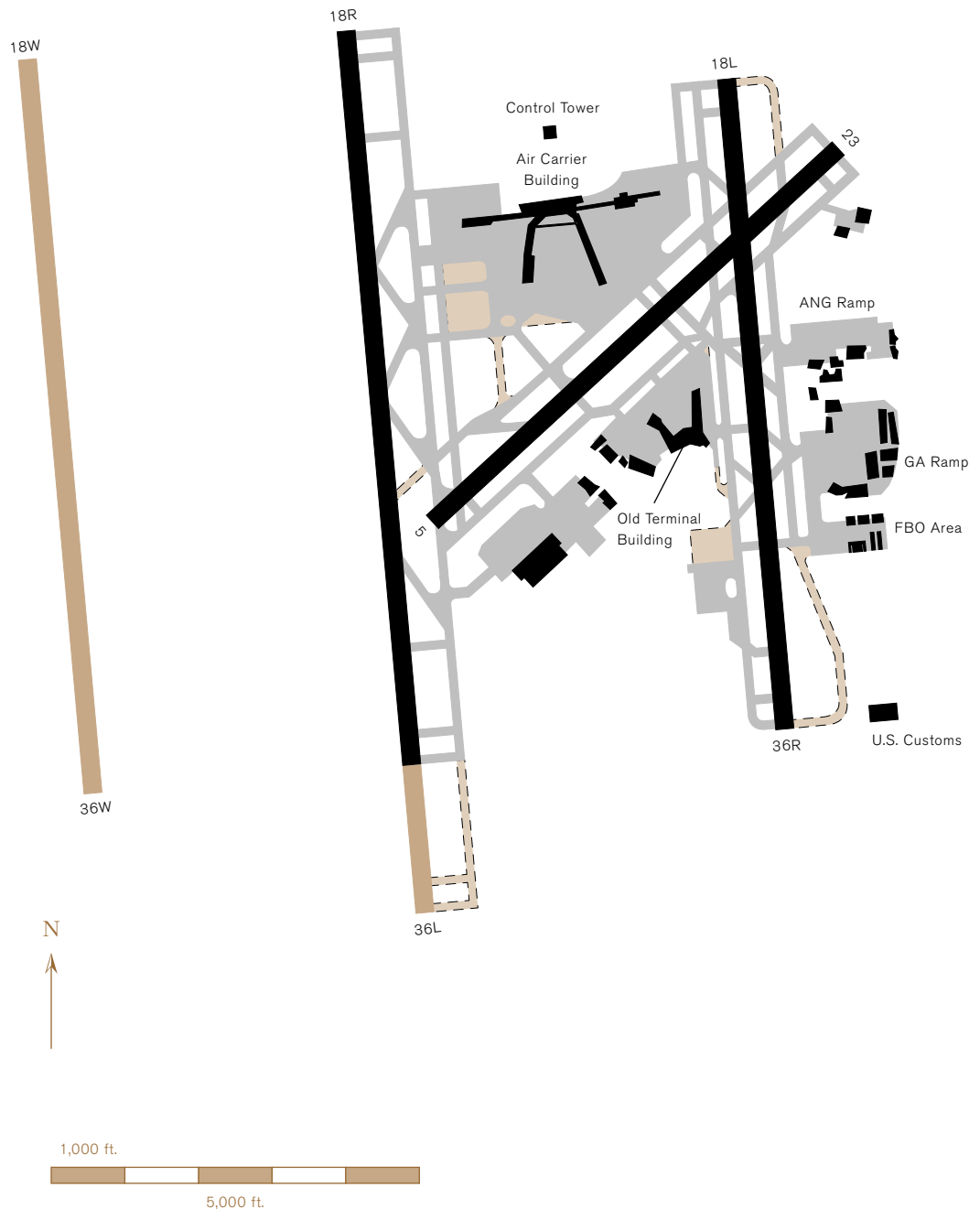


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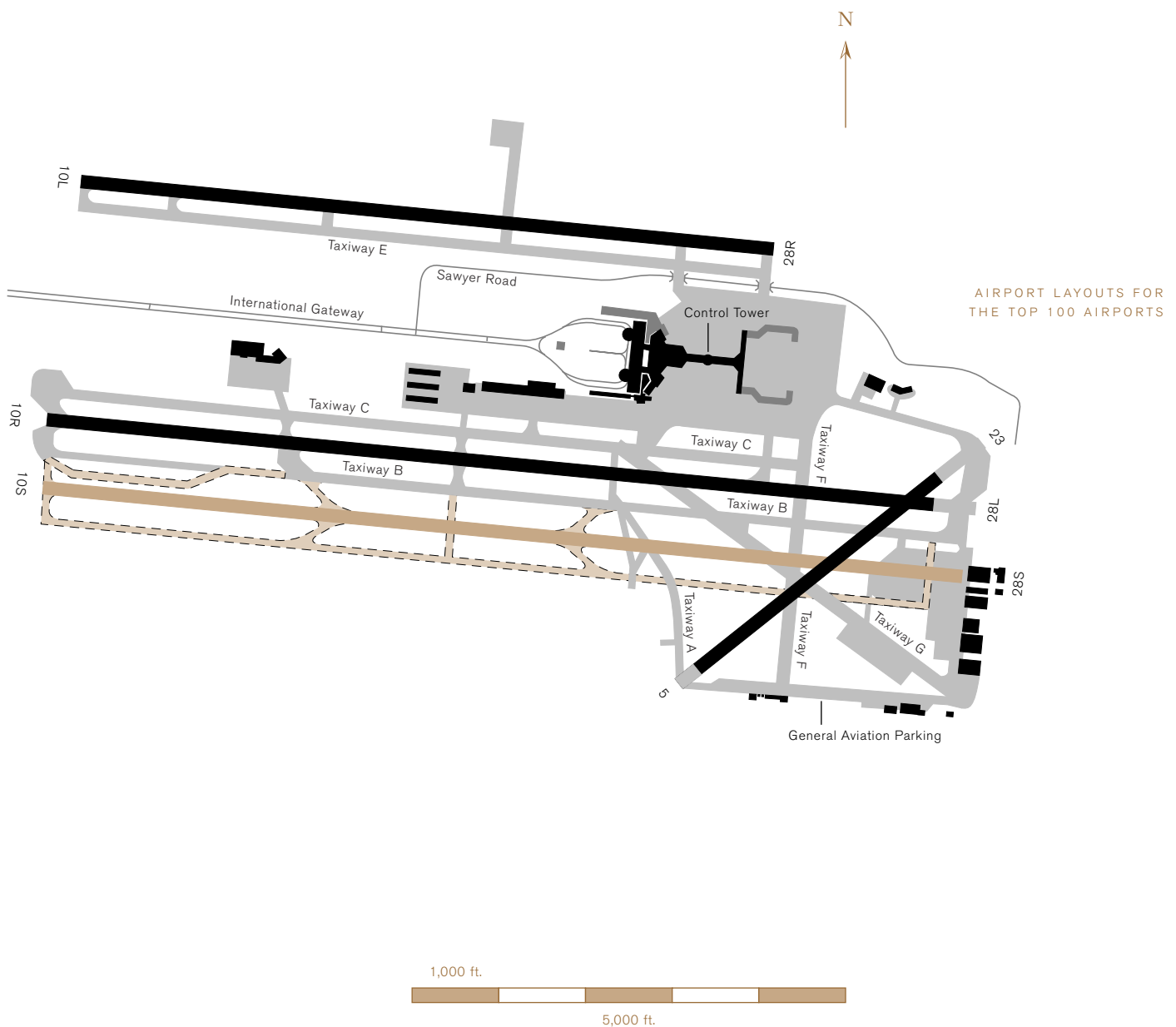
## CLT — CHARLOTTE/DOUGLAS INTERNATIONAL AIRPORT

A third parallel 9,000-ft. Runway 18W/36W, 3,700 ft. west of Runway 18R/36L, is being planned. It would permit triple dependent IFR approaches. An Environmental Impact Statement is underway and is expected to be completed by late-1999. Construction is expected to start in early 2001 and be completed by mid-2003, at an estimated cost of \$140 million. A 2,000-ft. extension of Runway 18R/36L is also planned. The estimated cost is \$22 million, and it is expected to be operational beyond 2006. The extension is primarily for departures.



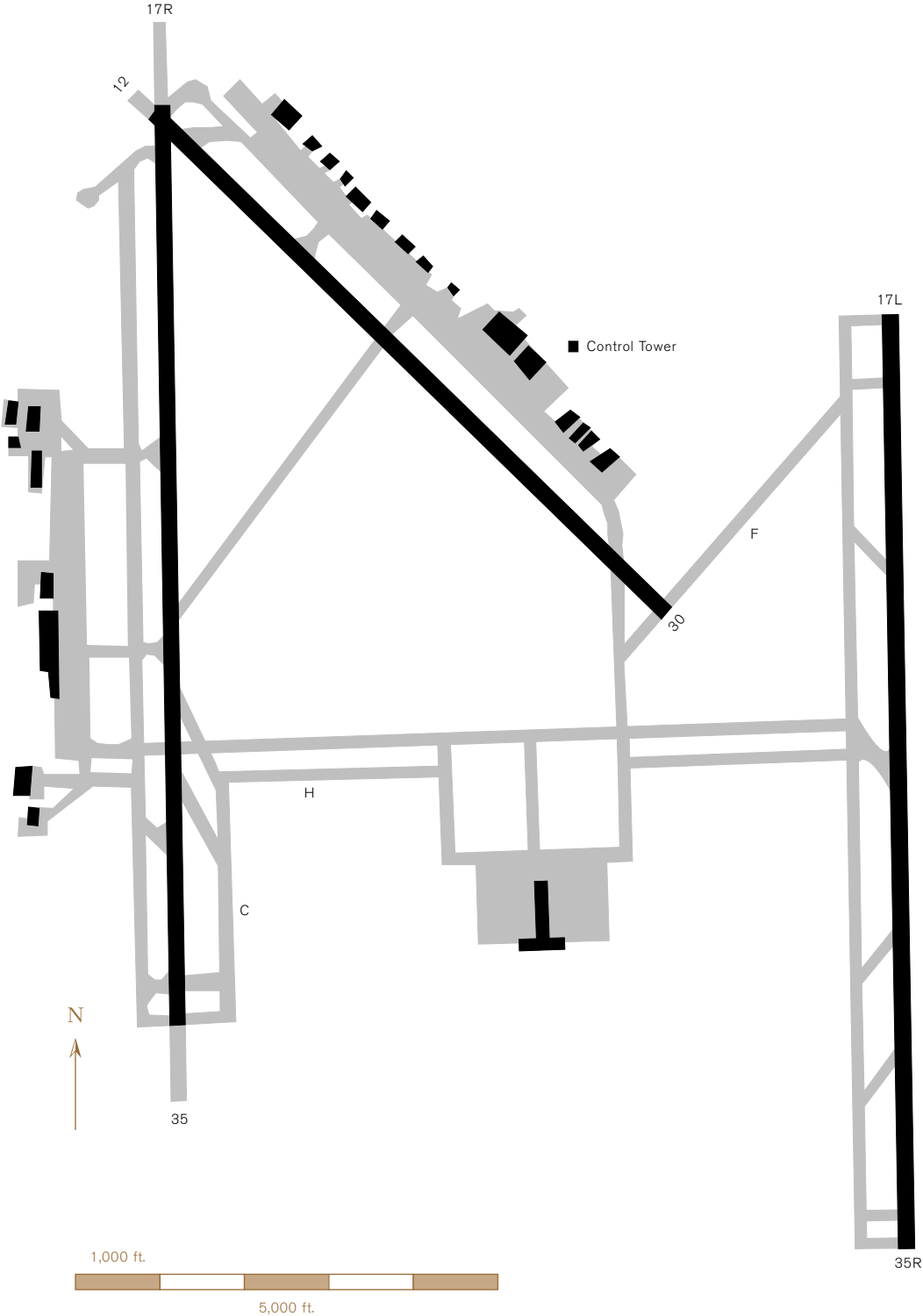
## CMH – PORT COLUMBUS INTERNATIONAL AIRPORT

The Airport Layout Plan has been coordinated to show a third parallel Runway 10S/28S, constructed 800 ft. south of the existing Runway 10R/28L. This runway will be 10,250 ft. long and 150 ft. wide, with two high-speed exits, a 90-degree exit at the center, and a 90-degree bypass taxiway at each end. This would provide a 3,650 ft. separation between the proposed Runway 10S/28S and the existing Runway 10L/28R. With the installation of the Precision Runway Monitor (PRM), the existing Runway 10L/28R and the proposed Runway 10S/28S could be used for arrival air traffic. Runway 10R/28L would be used as the departure runway. Expected operational date is 2020, with project costs estimated at \$100 million.



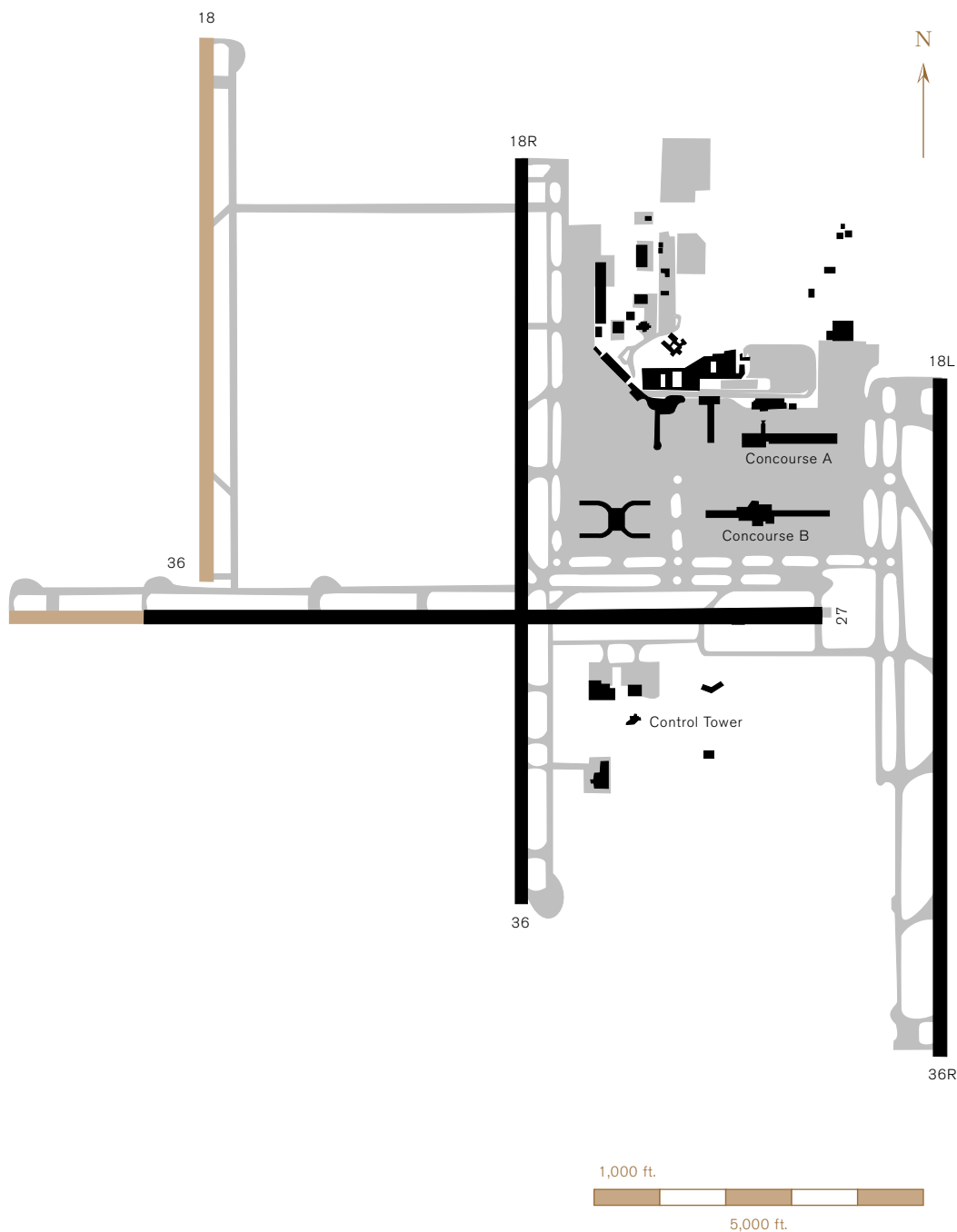
**COS — COLORADO SPRINGS MUNICIPAL AIRPORT**

In 1997, Taxiways H (west), F, and C (south) were constructed with passenger facility charge funds. The completion of Taxiway C (north) is the next planned capacity project.



## CVG — GREATER CINCINNATI INTERNATIONAL AIRPORT

A new 8,000 ft. third parallel Runway 18R/36L is planned to be located 3,500 to 5,000 ft. west of the existing Runway 18R/36L (to be renamed 18C/36C). The estimated cost is \$233 million. The expected operational date is 2004. The new runway may allow triple independent IFR approaches. A 2,000 ft. extension of Runway 9/27 is also planned. It is expected to be completed by 2003, at an estimated cost of \$12 million. The extension would allow departures of aircraft with heavier payloads and/or longer haul-lengths. An EIS is currently underway for both projects, and is expected to be completed by late 2000.

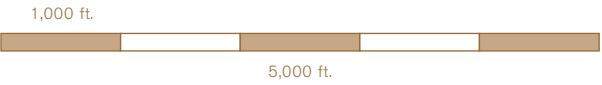


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**DAL — DALLAS-LOVE FIELD**

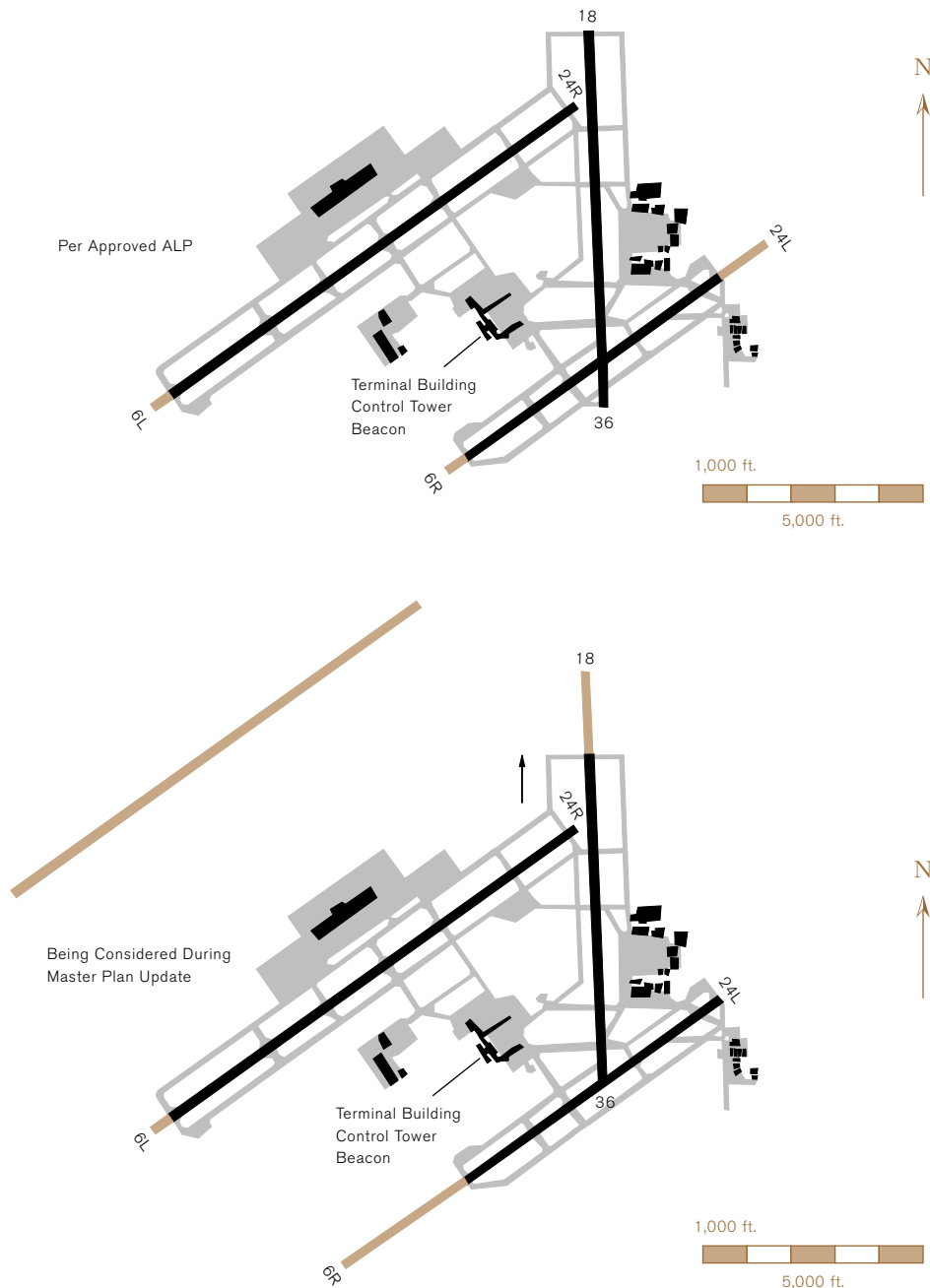
There are no new runway or runway extension projects planned, proposed, or currently under construction at this airport.



## DAY – DAYTON INTERNATIONAL AIRPORT

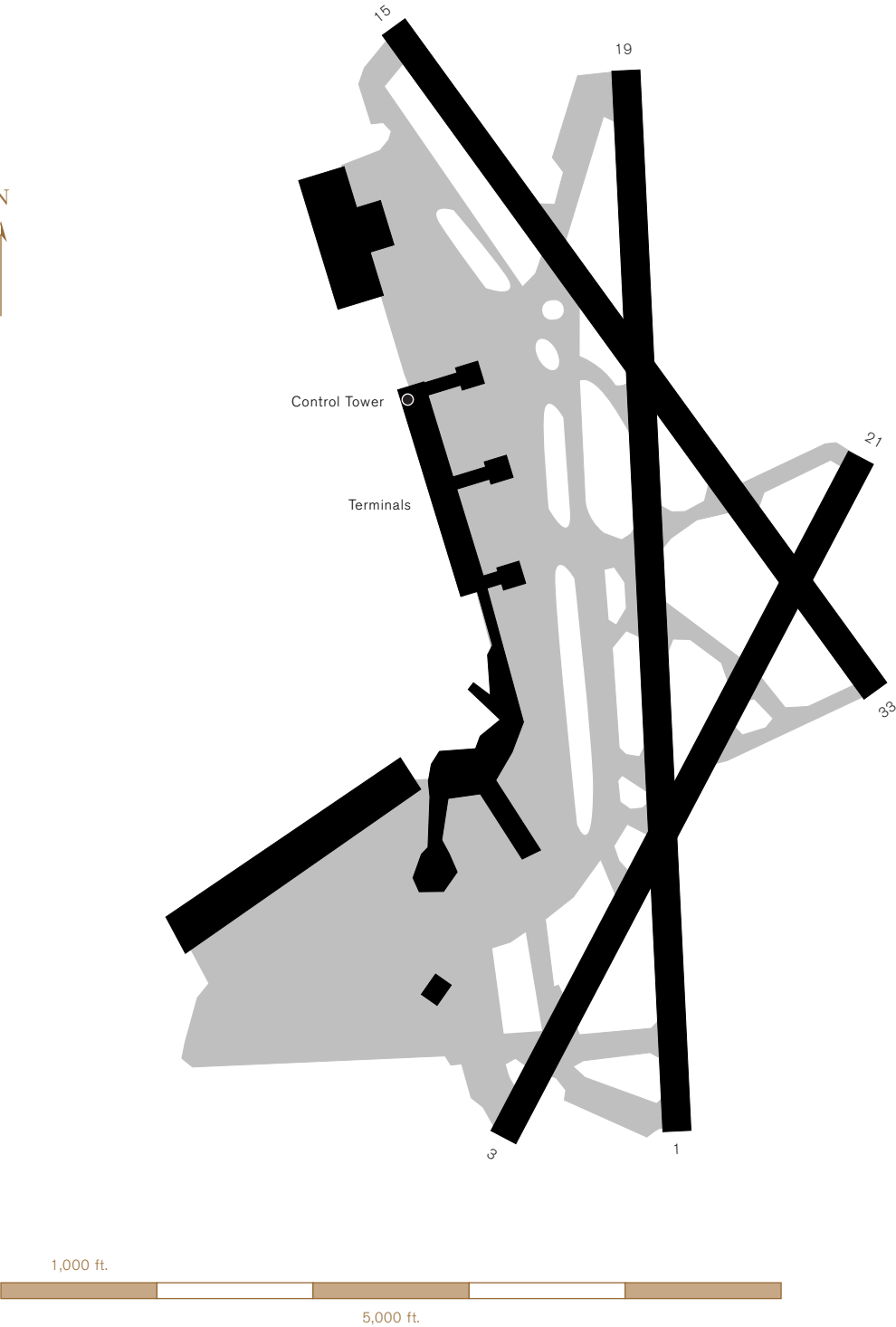
The approved Airport Layout Plan (ALP) shows a proposed 600-ft. extension to Runway 6L end to provide a total length of 11,500 ft. The ALP also shows a proposed 815-ft. extension to Runway 6R end and a 1,540-ft. extension to Runway 24L end to provide a total length of 9,355 feet.

The City of Dayton is currently updating their Master Plan and is considering the following revisions: (1) a northerly shift of Runway 18/36 including an extension to Runway 18 end to provide a total length of 9,500 ft.; (2) an additional extension to Runway 6R end to provide a total length of 11,000 ft.; and, (3) construction of a third parallel runway northwest of Runway 6L/24R to provide a total length of 11,000 ft.



DCA — RONALD REAGAN NATIONAL AIRPORT

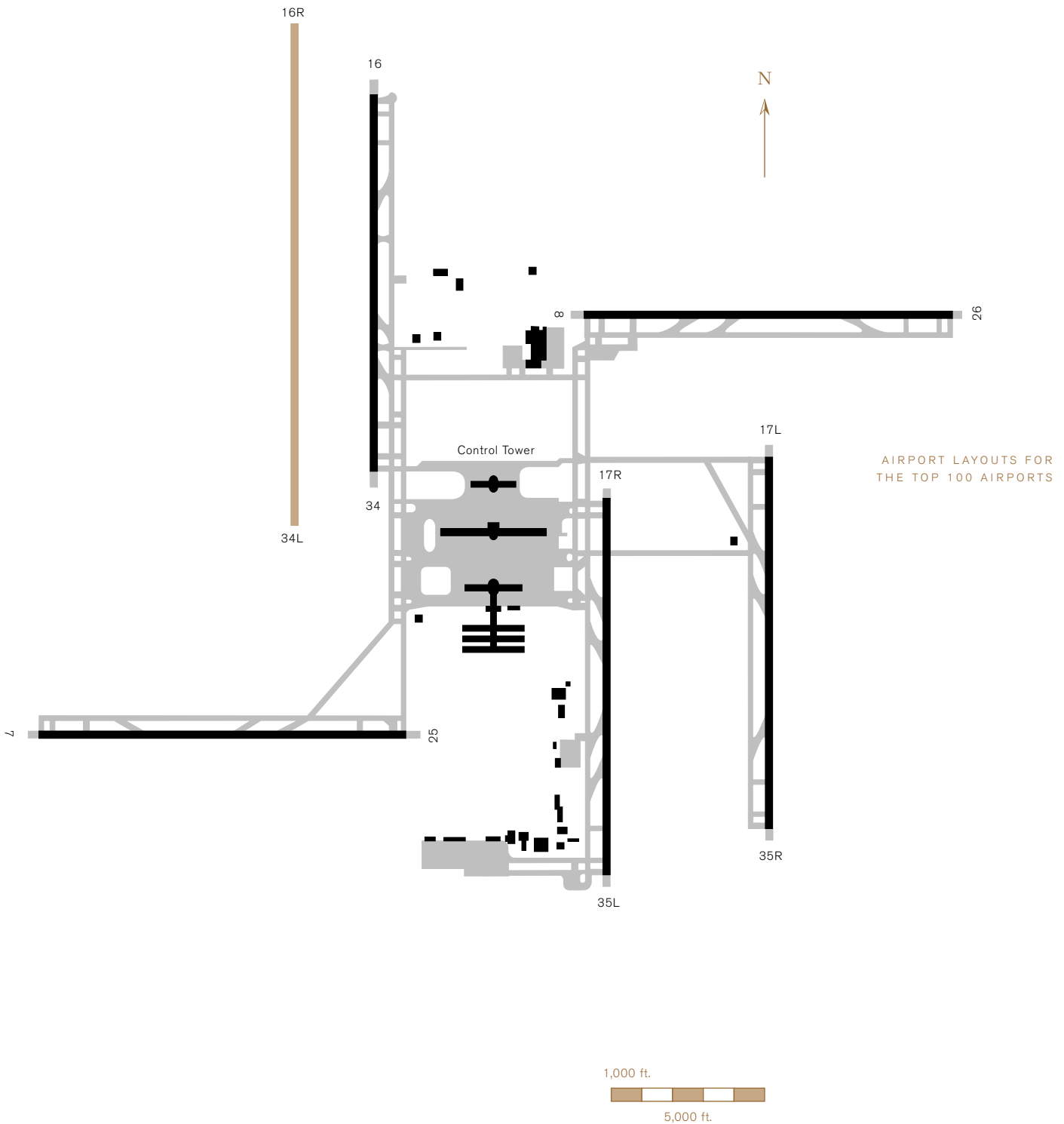
There are no new runway or runway extension projects planned, proposed, or currently under construction at this airport.





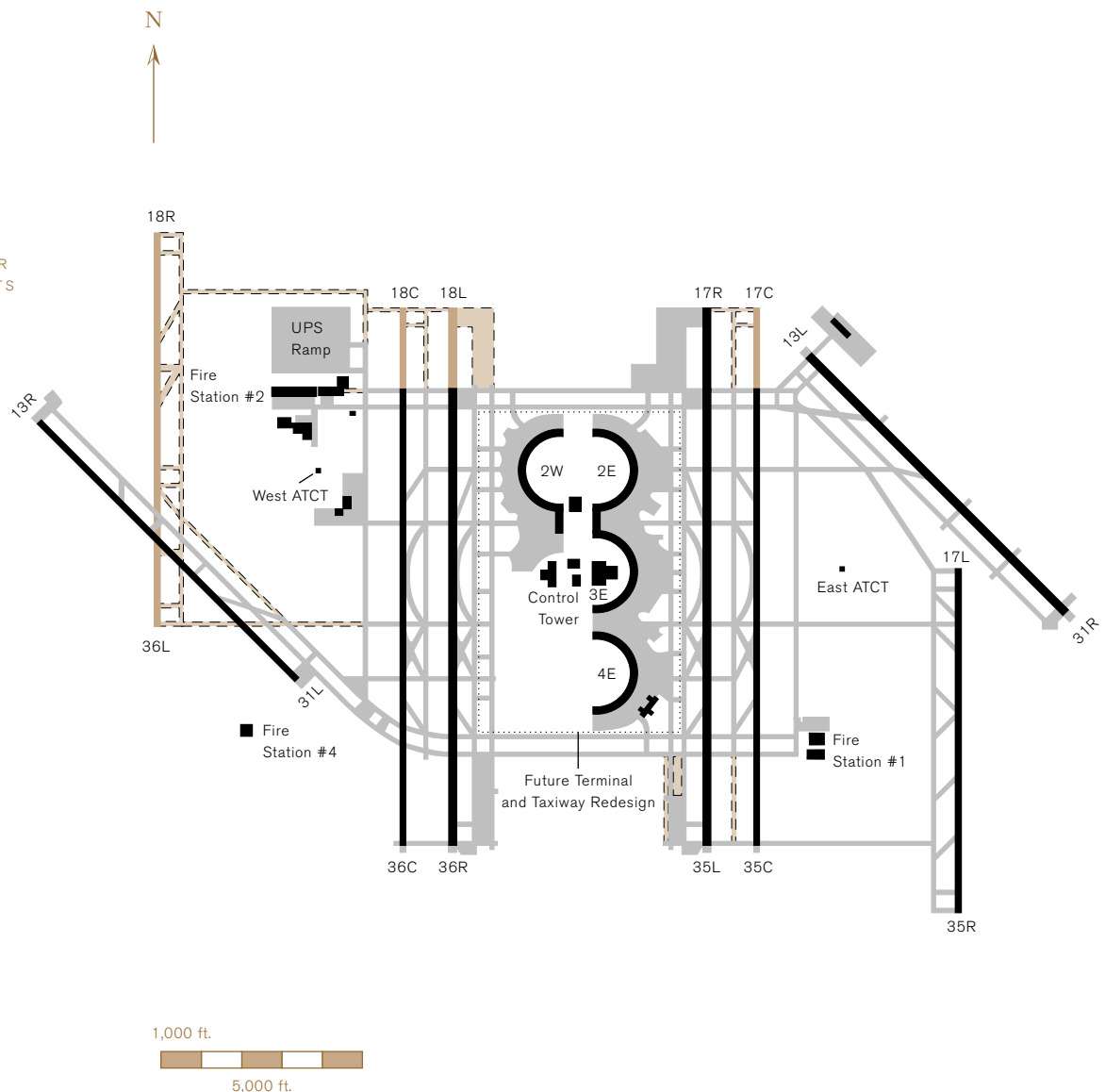
## DEN — DENVER INTERNATIONAL AIRPORT

Runway 16R/34L is the last of the six original runways to be built at the new airport. It will be separated 2,600 ft. from Runway 16L/34R, and be 16,000 ft. in length. The runway is expected to be completed in 2004, at an estimated cost of \$160 million. The cargo apron was expanded and Taxiway A extended with local funds in 1998.



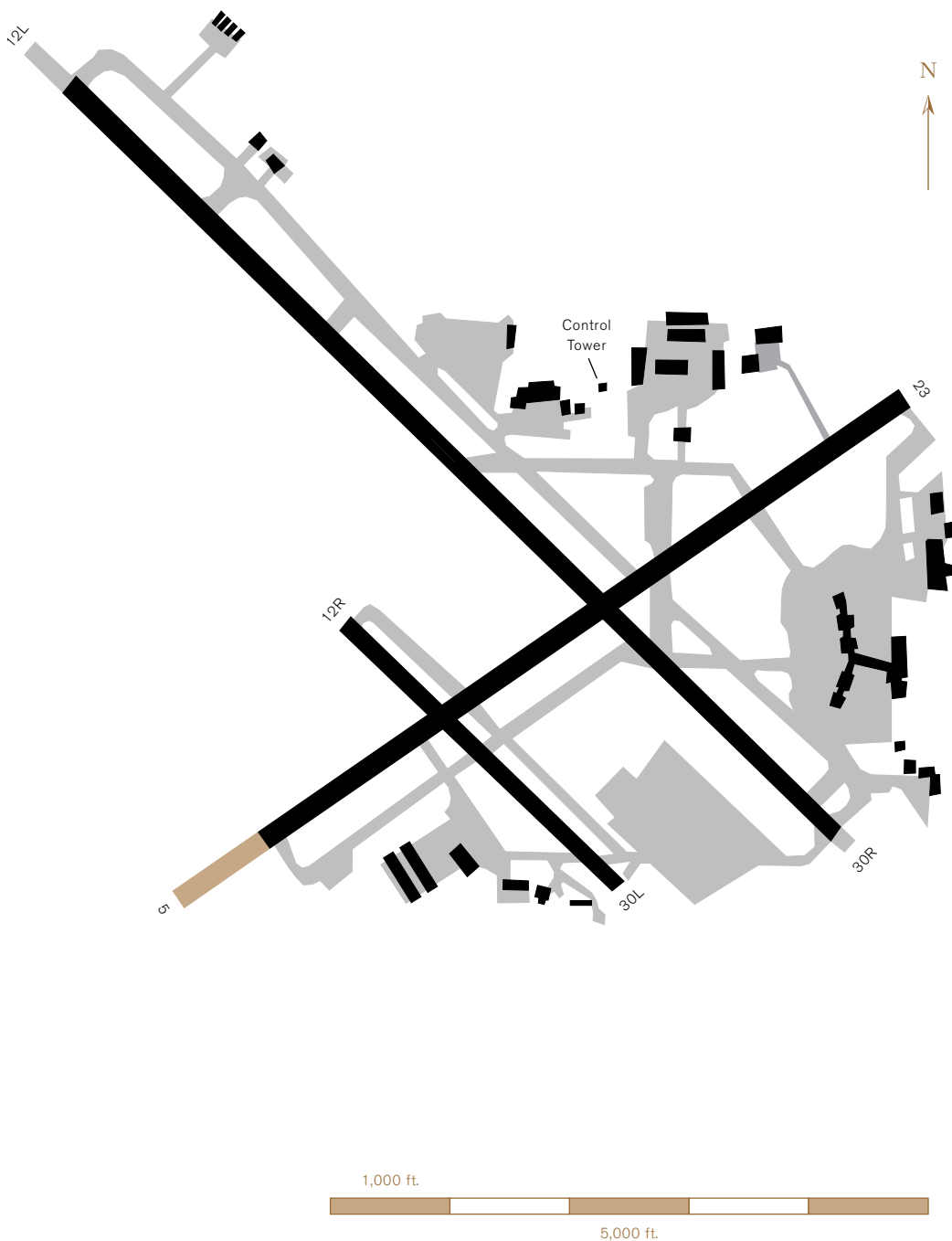
## DFW — DALLAS-FORT WORTH INTERNATIONAL AIRPORT

Proposed 2,000-ft. extensions to all of the north/south parallel runways will provide an overall length of 13,400 ft. for each. An environmental assessment for the extensions to Runway 17C/35C, Runway 18L/36R, and Runway 18R/36L was completed in 1998. The estimated cost of the extensions is \$92 million. A terminal expansion program has recently been completed that added five new jet departure gates to the south side of Terminal 2W; provided baggage and passenger connections to Terminal 2E; and renovated a portion of Terminal 2W. The total cost of this program was approximately \$100 million. Construction on the west runway, Runway 18R/36L, will begin when warranted by aviation demand. It could be available as early as 2005. The estimated cost is \$367.3 million. It will be located 5,800 ft. west of Runway 18R/36L (to be renamed 18C/36C), and will be used primarily for arrivals. The addition of Runway 18R/36L will allow DFW to accommodate quadruple simultaneous precision instrument approaches.



## DSM — DES MOINES INTERNATIONAL AIRPORT

A Finding of No Significant Impact (FONSI) was approved in August 1995, for a south-west extension of Runway 5/23. Construction began in 1997, and is expected to be completed in 2001. Cost for construction is estimated at \$31 million, with an additional estimated \$23 million for road relocation.

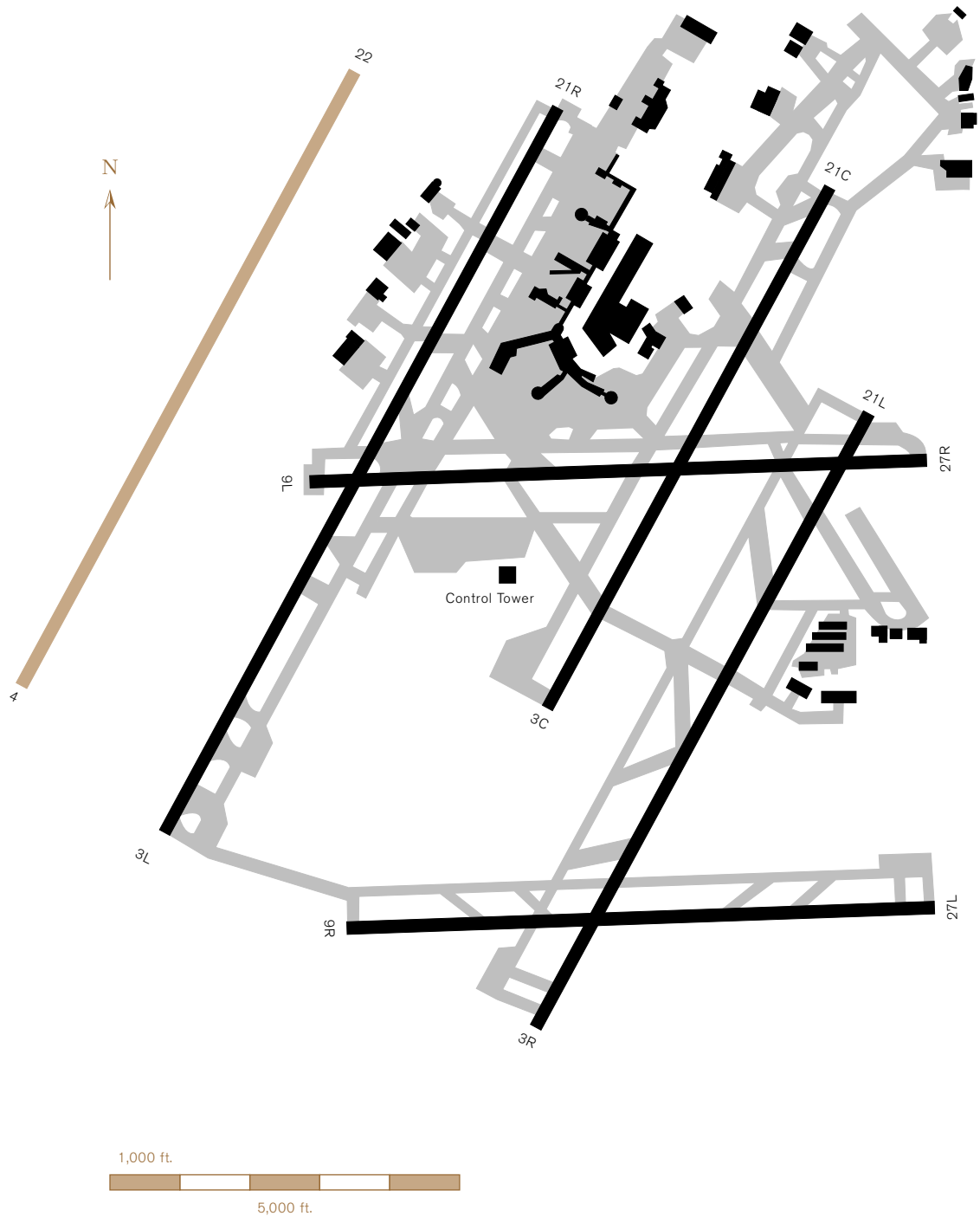


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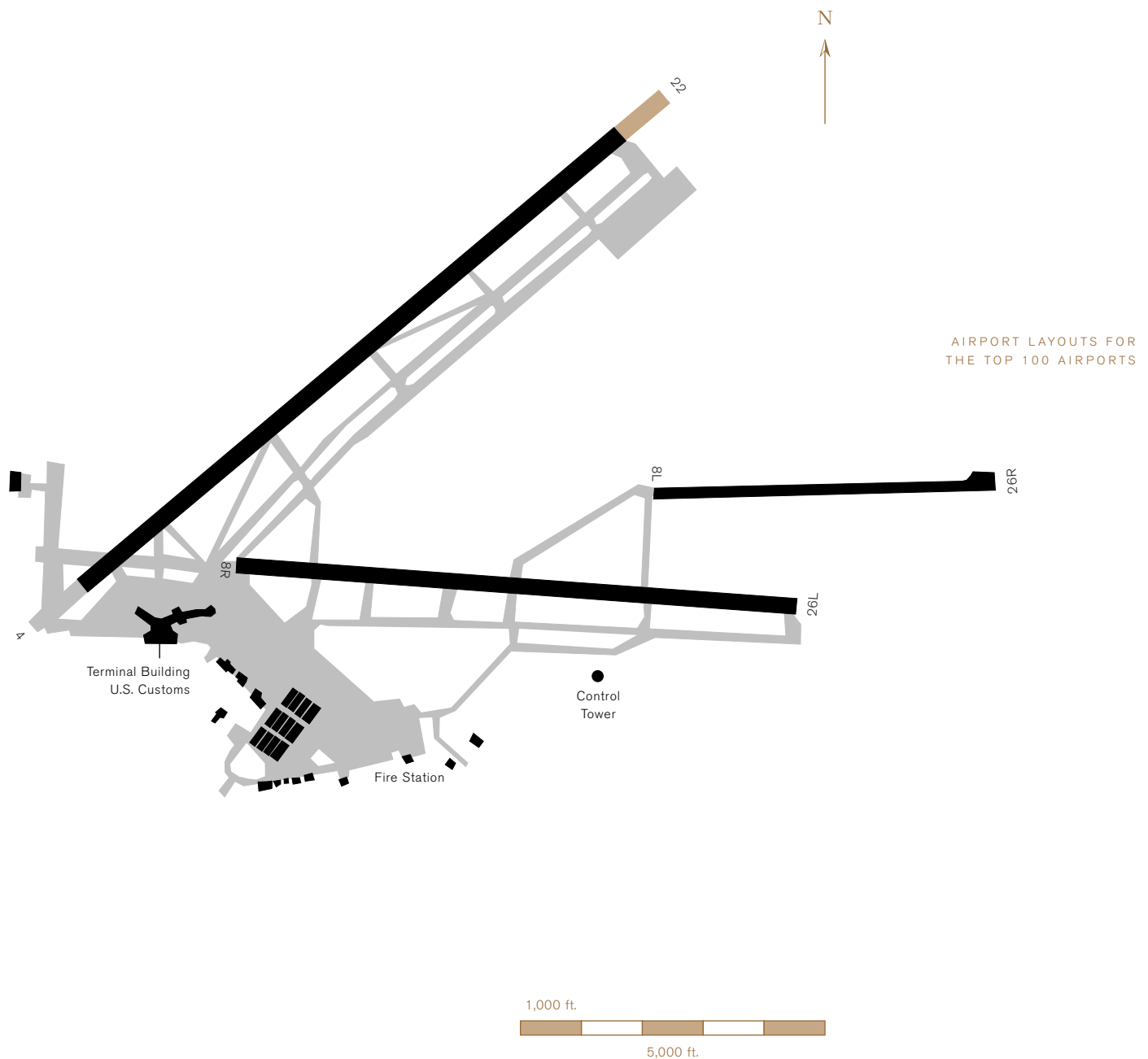
## DTW — DETROIT METROPOLITAN WAYNE COUNTY AIRPORT

A fourth north-south parallel, Runway 4/22 began in 1999 and should be completed in 2001. The estimated cost of construction is \$116.5 million. This runway could potentially permit triple IFR arrivals with one dependent and one independent pairing. An environmental assessment was submitted in September 1989, and a record of decision was issued in March 1990. Relocation of roads, utilities, and drainage is underway.



## ELP — EL PASO INTERNATIONAL AIRPORT

A 1,000-ft. extension to Runway 22 is included in the currently approved Passenger Facility Charge for the year 2000. Estimated cost would be \$8 million.

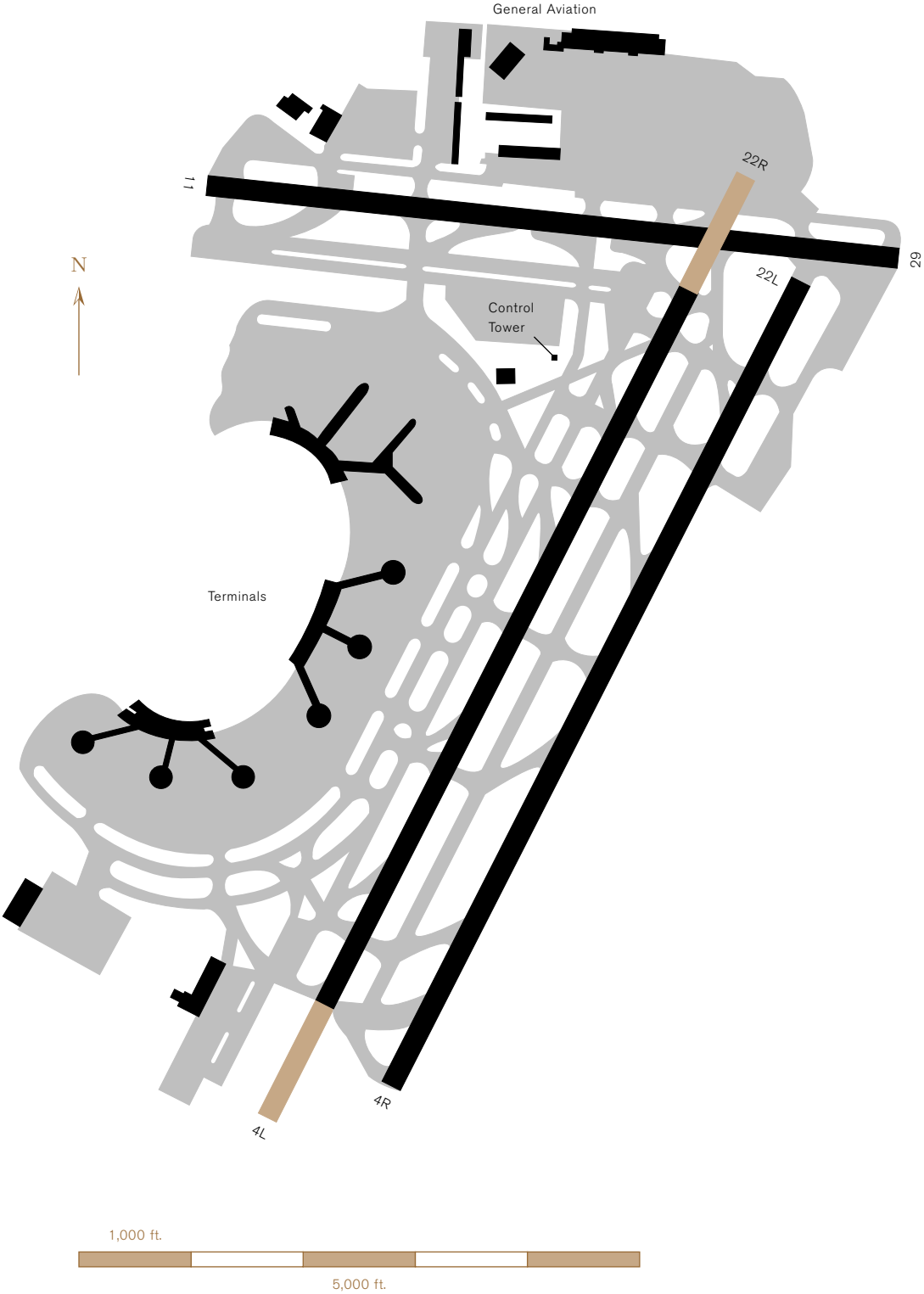


**EWR — NEWARK INTERNATIONAL AIRPORT**

An extension to Runway 4L/22R is currently under construction. The estimated operational date is 2000. The estimated cost of construction is \$55 million.

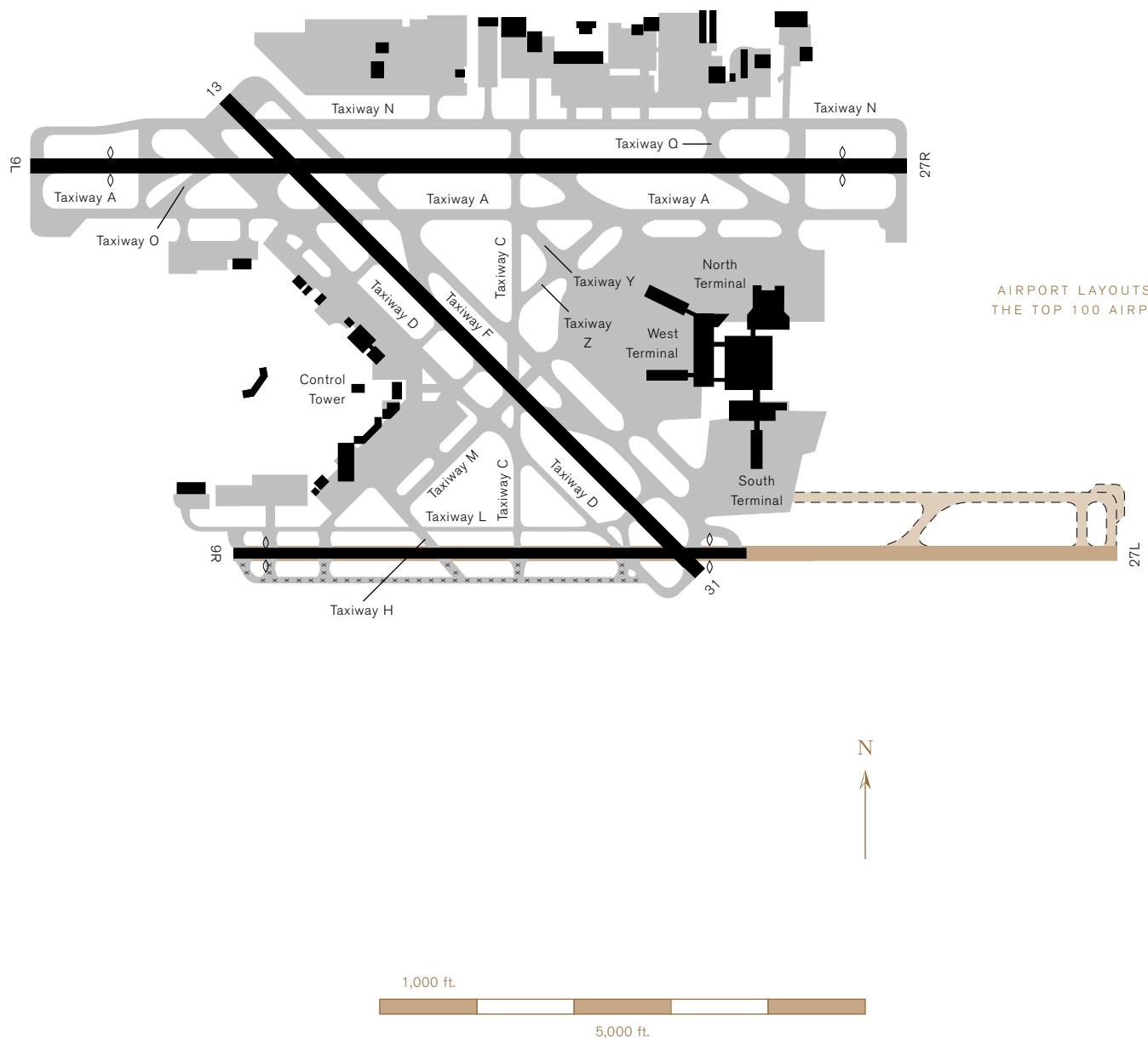
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## FLL — FORT LAUDERDALE-HOLLYWOOD INTERNATIONAL AIRPORT

An extension of the short parallel Runway 9R/27L to 9,000 ft. is planned to provide the airport with a second parallel, air carrier runway. Construction is expected to begin in 2003. The estimated cost of construction is \$300 million. The anticipated operational date is 2005. An EIS is underway and expected to be completed in 2000. The extended runway would be used for arrivals and departures and would allow dual dependent IFR arrivals of all types of aircraft.



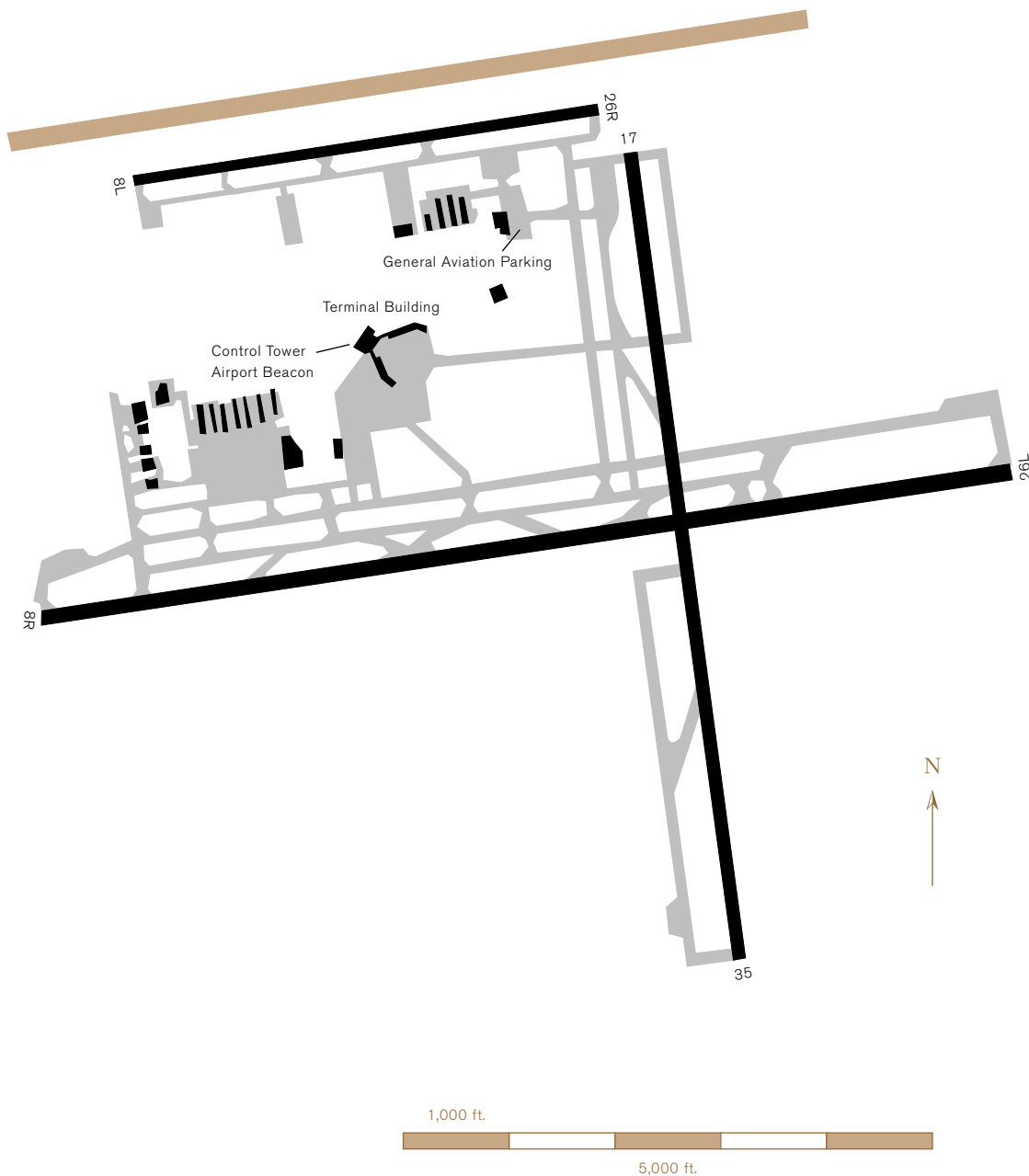
The long-term future plan is to construct a new parallel Runway 3L/21R, 8,800 ft. long and separated from Runway 3R/21L by 4,400 ft. This would enable independent parallel operations, doubling hourly IFR arrival capacity.





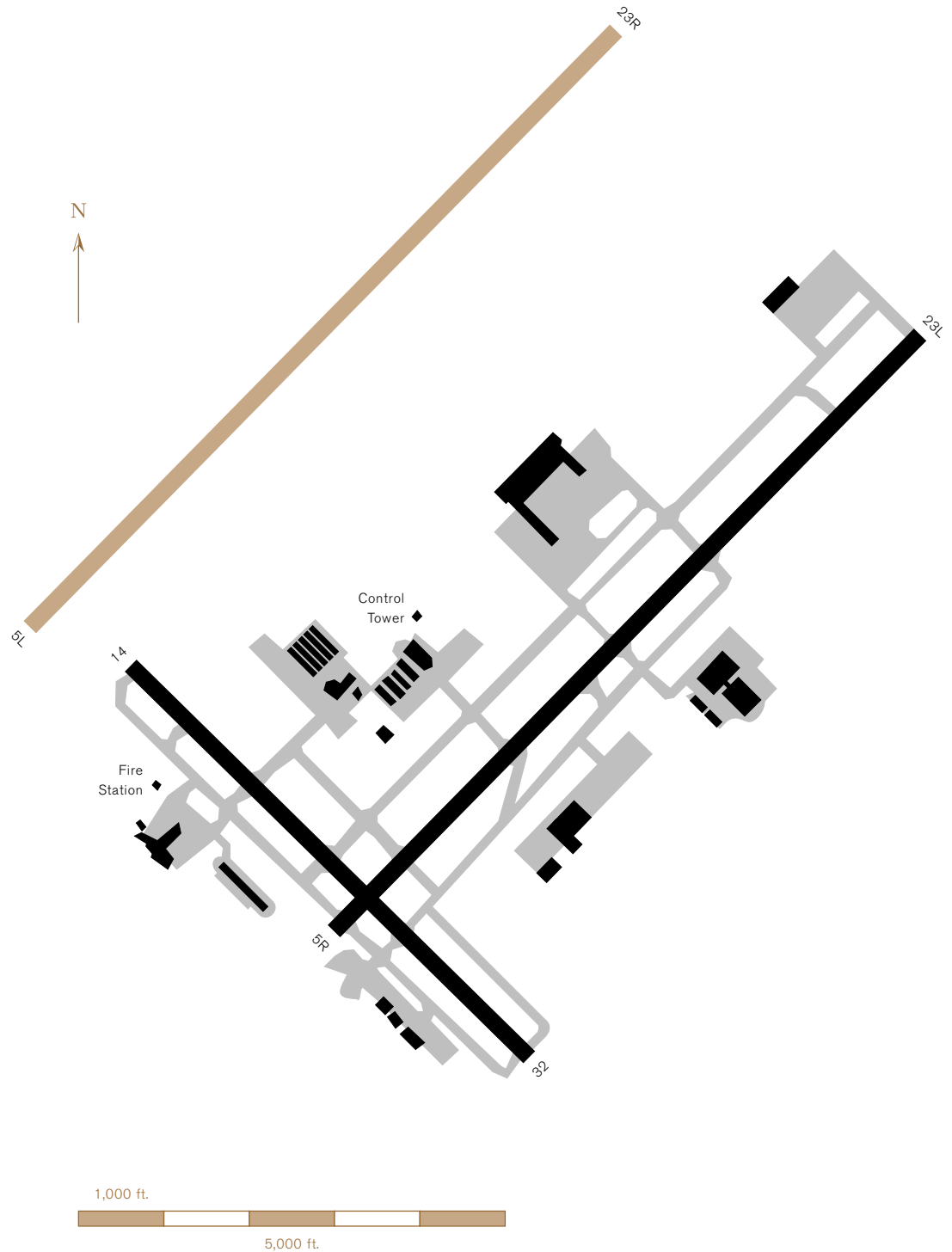
## GRR — GRAND RAPIDS KENT COUNTY INTERNATIONAL AIRPORT

A new 7,000-ft. parallel Runway 8L/26R is planned for future development. The current 8L/26R would be converted into a taxiway at that time. There are no immediate plans to construct Runway 8L/26R. This is a long-term proposal in 10-20 years.



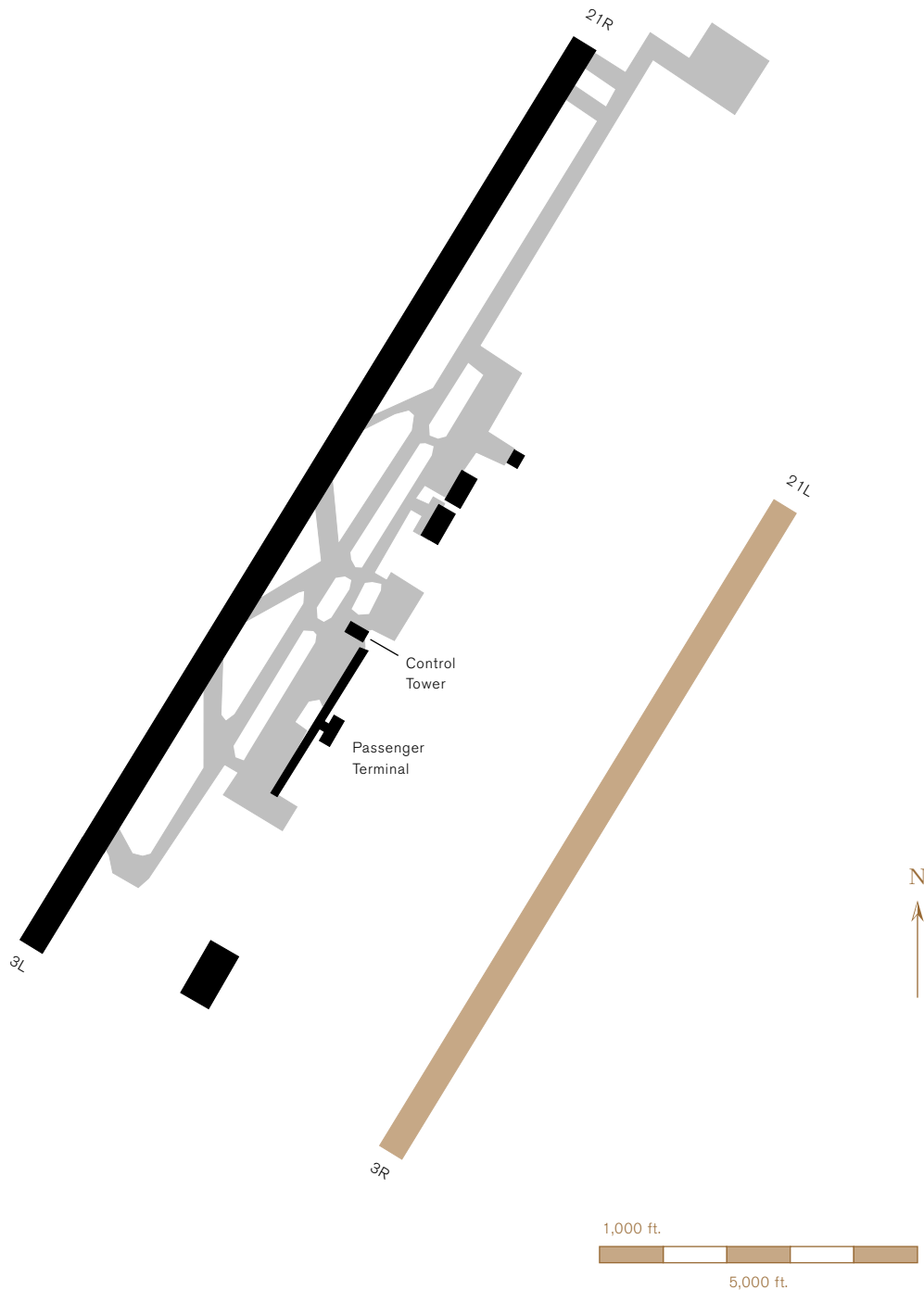
### GSO — GREENSBORO PIEDMONT TRIAD INTERNATIONAL AIRPORT

Construction of a new 10,000 ft. parallel Runway 5L/23R, 5,300 ft. north of Runway 5/23, is being planned. An EIS is currently underway and is expected to be complete by 2001. It is expected to be operational by 2004. The estimated cost is \$96 million. The new runway would allow dual independent arrivals and departures in all weather conditions.



## GSP — GREER GREENVILLE-SPARTANBURG AIRPORT

A new 8,200-ft. parallel Runway 3R/21L is anticipated in 2010 at an estimated cost of \$65 million. Presently, it is planned to have a 4,300-ft. separation from Runway 3L/21R. This would allow dual independent IFR arrivals, potentially doubling hourly IFR arrival capacity. Also, an extension of Runway 3L/21R to 11,000 ft. was completed in 1999 at a cost of \$57.6 million. The extension allows departures of aircraft with larger payloads and/or greater haul-lengths.

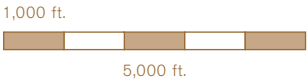
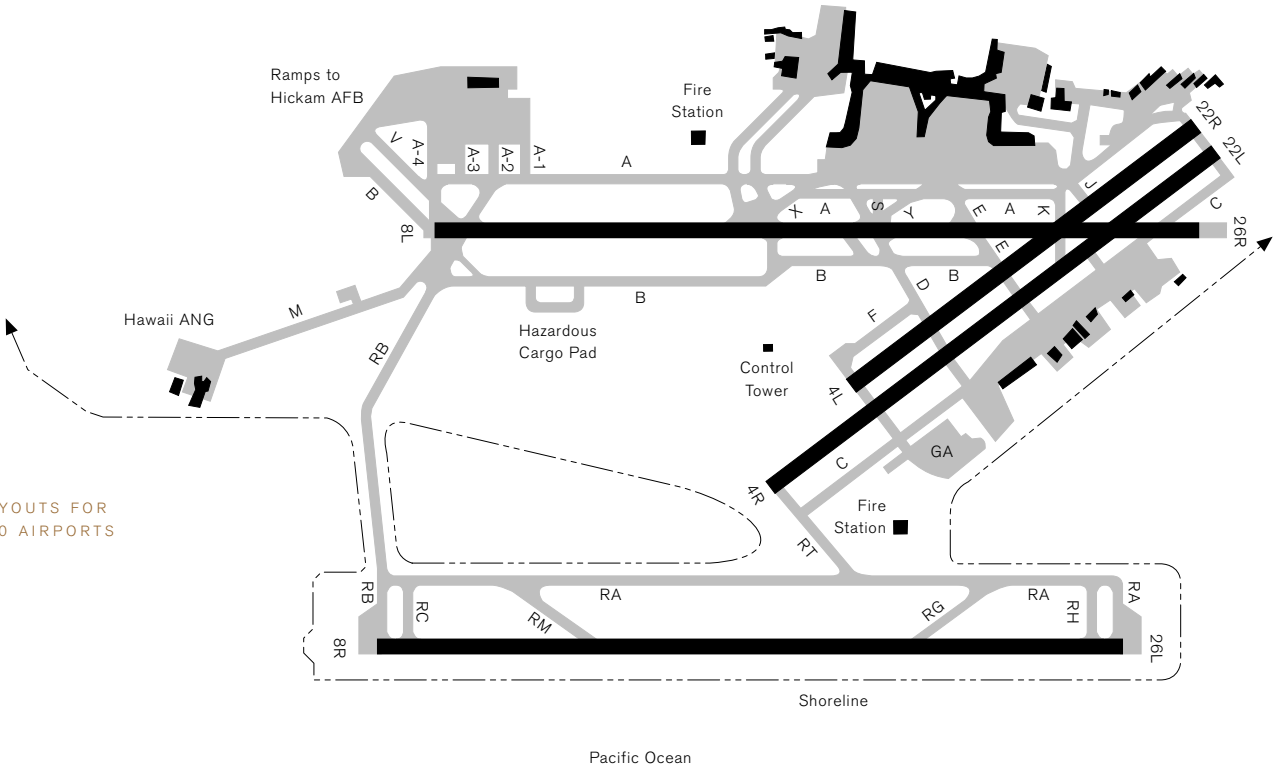


**HNL – HONOLULU INTERNATIONAL AIRPORT**

There are no new runway or runway extension projects planned, proposed, or currently under construction at this airport.

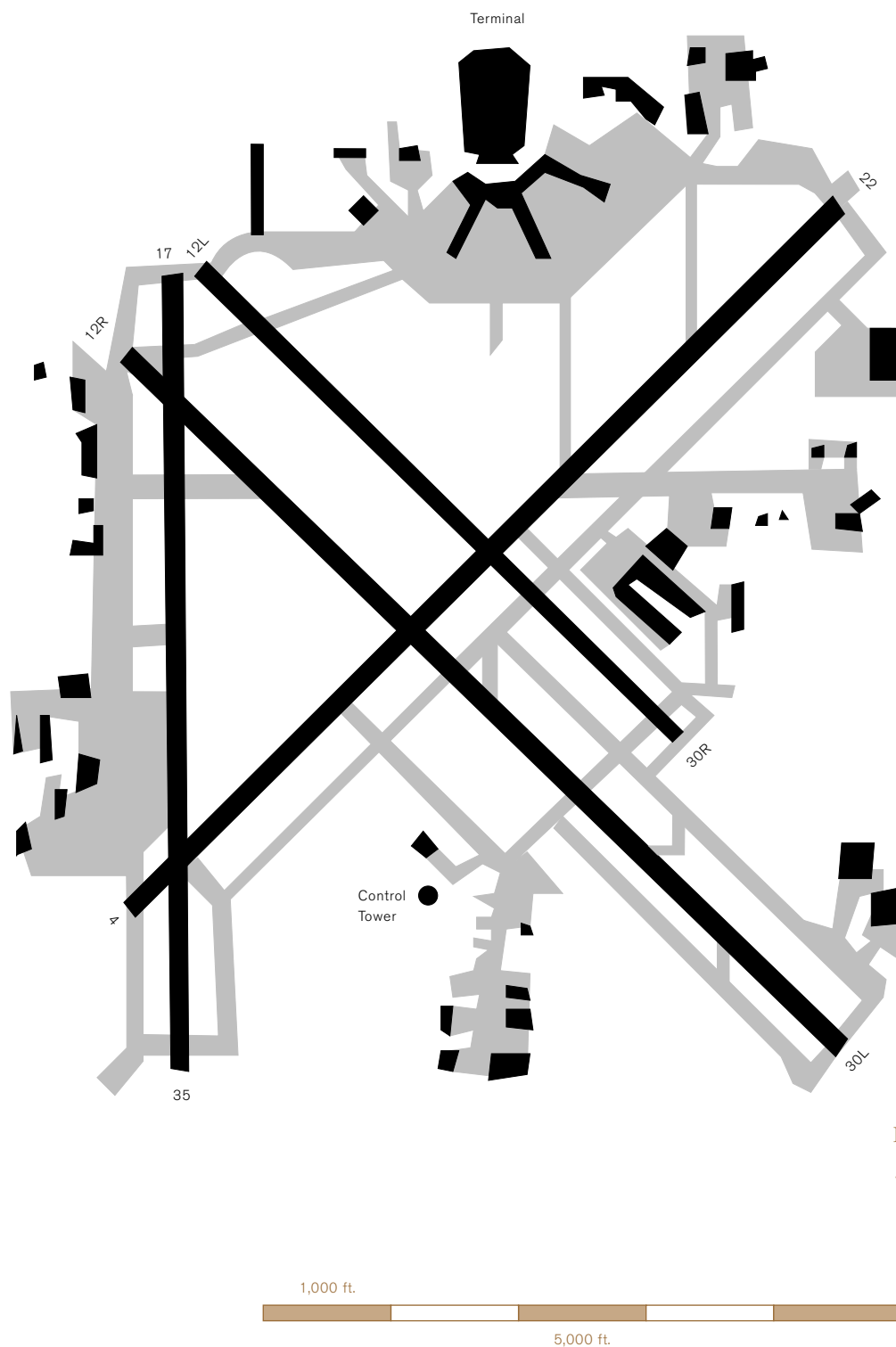
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## HOU — HOUSTON WILLIAM P. HOBBY AIRPORT

There are no new runway or runway extension projects planned, proposed, or currently under construction at this airport.

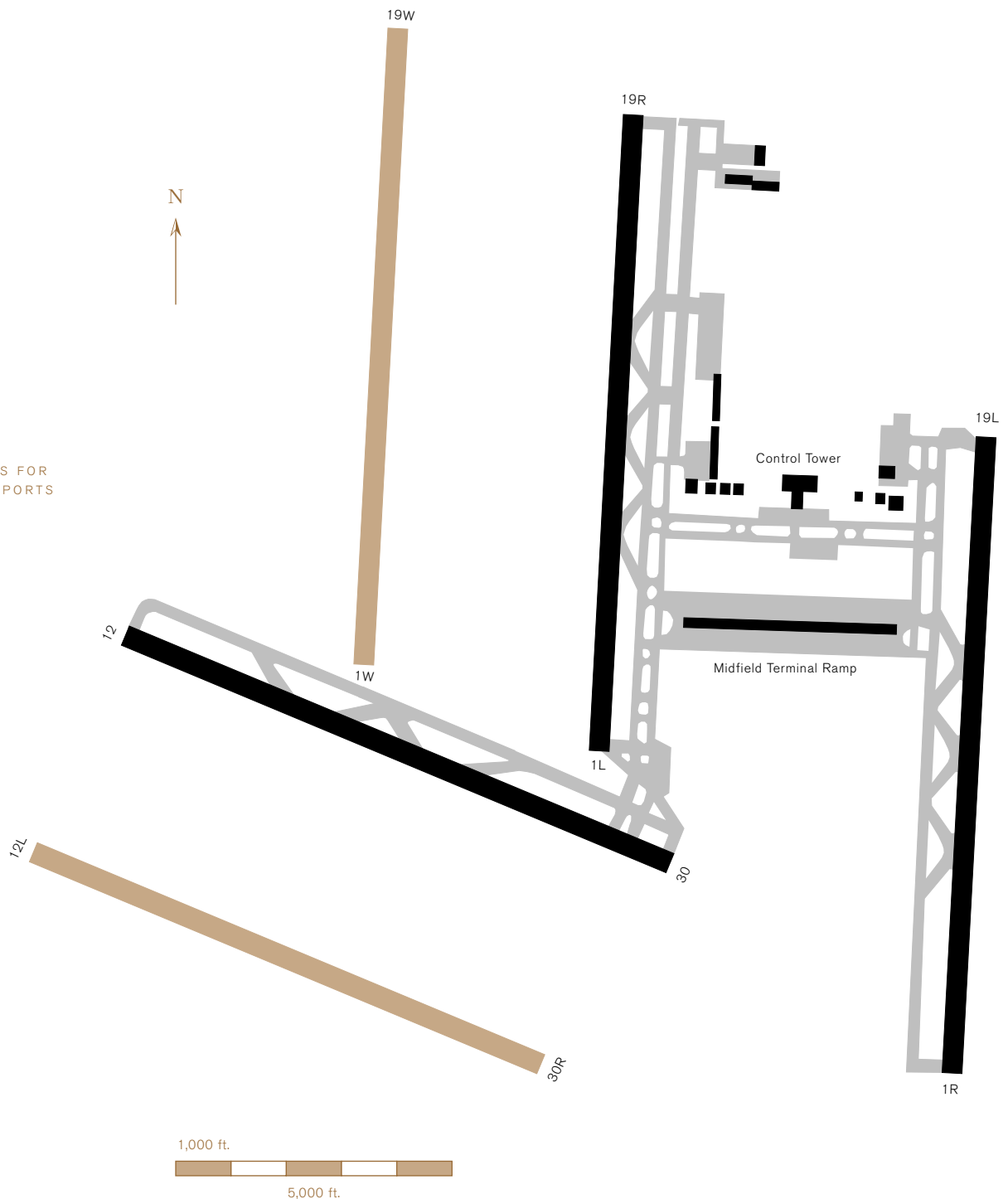


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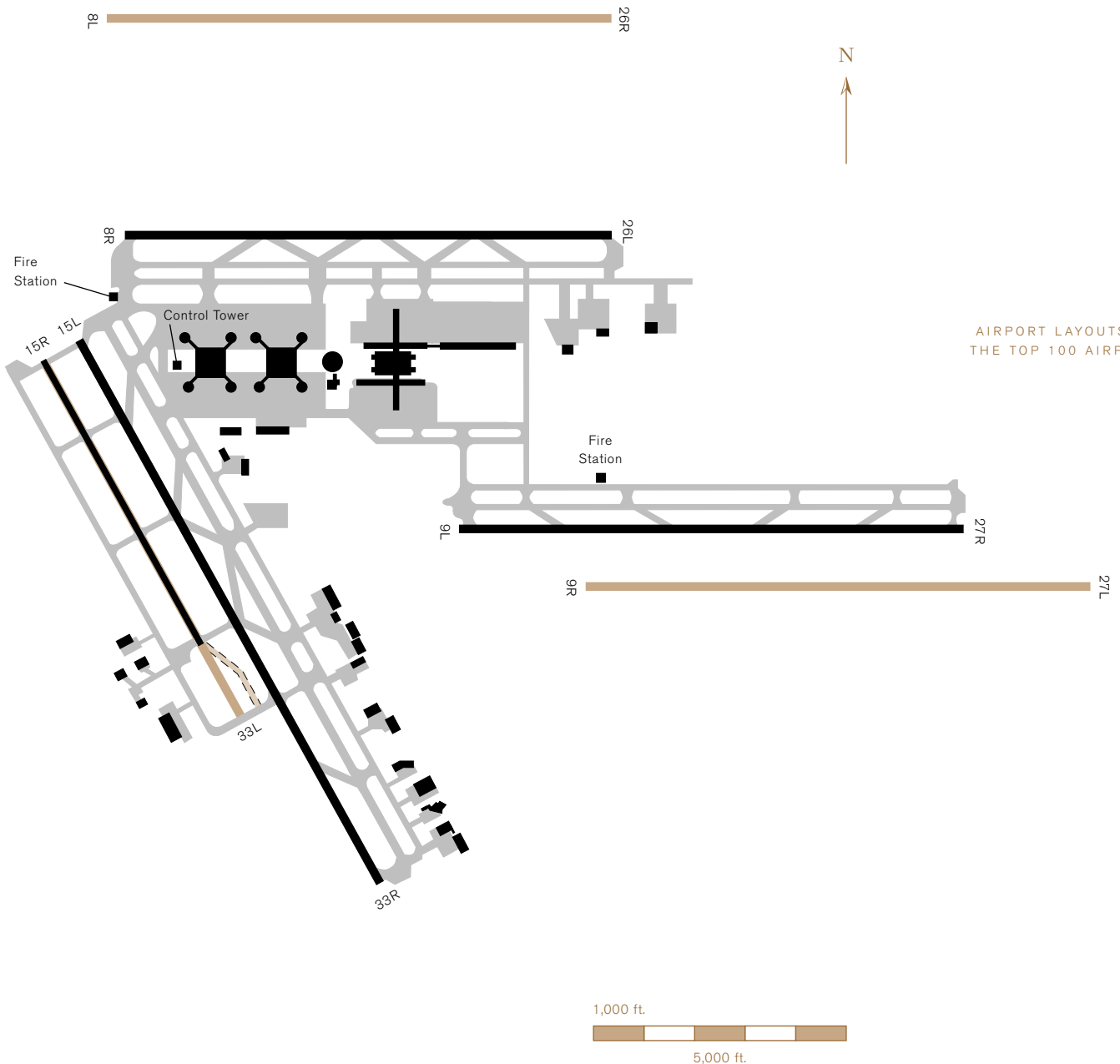
## IAD — WASHINGTON DULLES INTERNATIONAL AIRPORT

Two new parallel runways are under consideration. A north-south parallel Runway 1W/19W, would be located 4,300 ft. west of the existing parallels and north of Runway 12/30. Estimated opening date is 2008. This could provide triple independent parallel approaches, if they are approved. A second parallel Runway 12R/30L has been proposed for location 4,300 ft. southwest of Runway 12/30. The runway is expected to be completed by 2002.



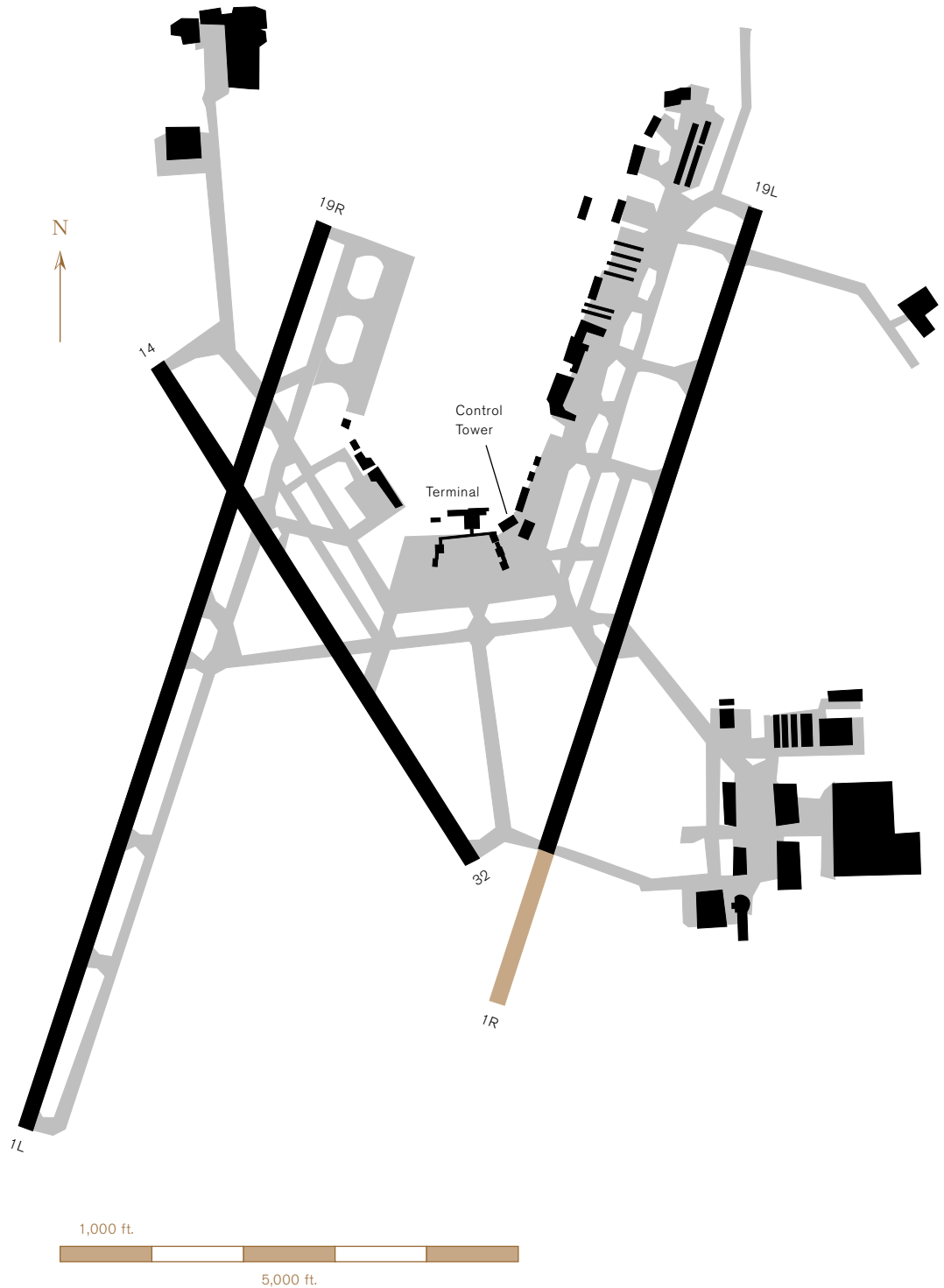
## IAH — GEORGE BUSH INTERCONTINENTAL AIRPORT/HOUSTON

An \$85 million, 4,000-ft. extension to Runway 15R/33L is planned for the year 2000. A new Runway 8L/26R is planned to be parallel to, and north of, the existing Runway 8/26. Commissioning is tentatively scheduled for the year 2002. Runway 8L/26R, in conjunction with Runways 9L/27R and 8R/26L, has the potential to support triple IFR approaches, if approved. Another new runway, 9R/27L, parallel to and south of Runway 9/27, is also planned in the distant future. Construction is expected to cost \$130 million for Runway 8L/26R.



### ICT — WICHITA MID-CONTINENT AIRPORT

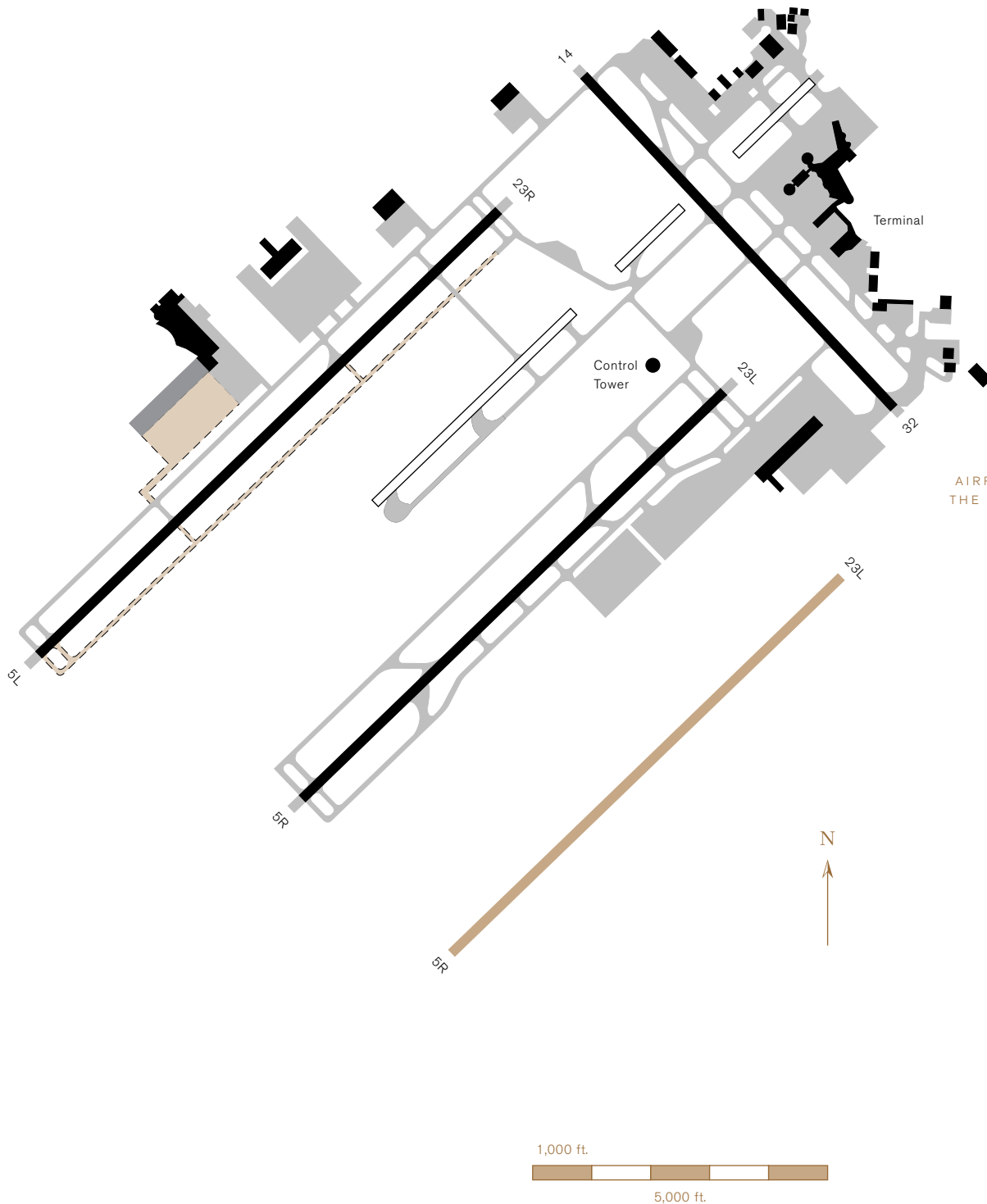
A 1,700-ft. extension to Runway 1R/19L is proposed for possible expansion of cargo operations. This is not considered as a potential development through 2015.





## IND — INDIANAPOLIS INTERNATIONAL AIRPORT

A third parallel Runway 5R/23L, is planned south of existing Runway 5R/23L (to be renamed 5C/23C). Estimated project cost is \$80 million, and the expected operational date is 2008. Taxiway “N” was put into service in October 1999 at a total cost of \$7.6 million.



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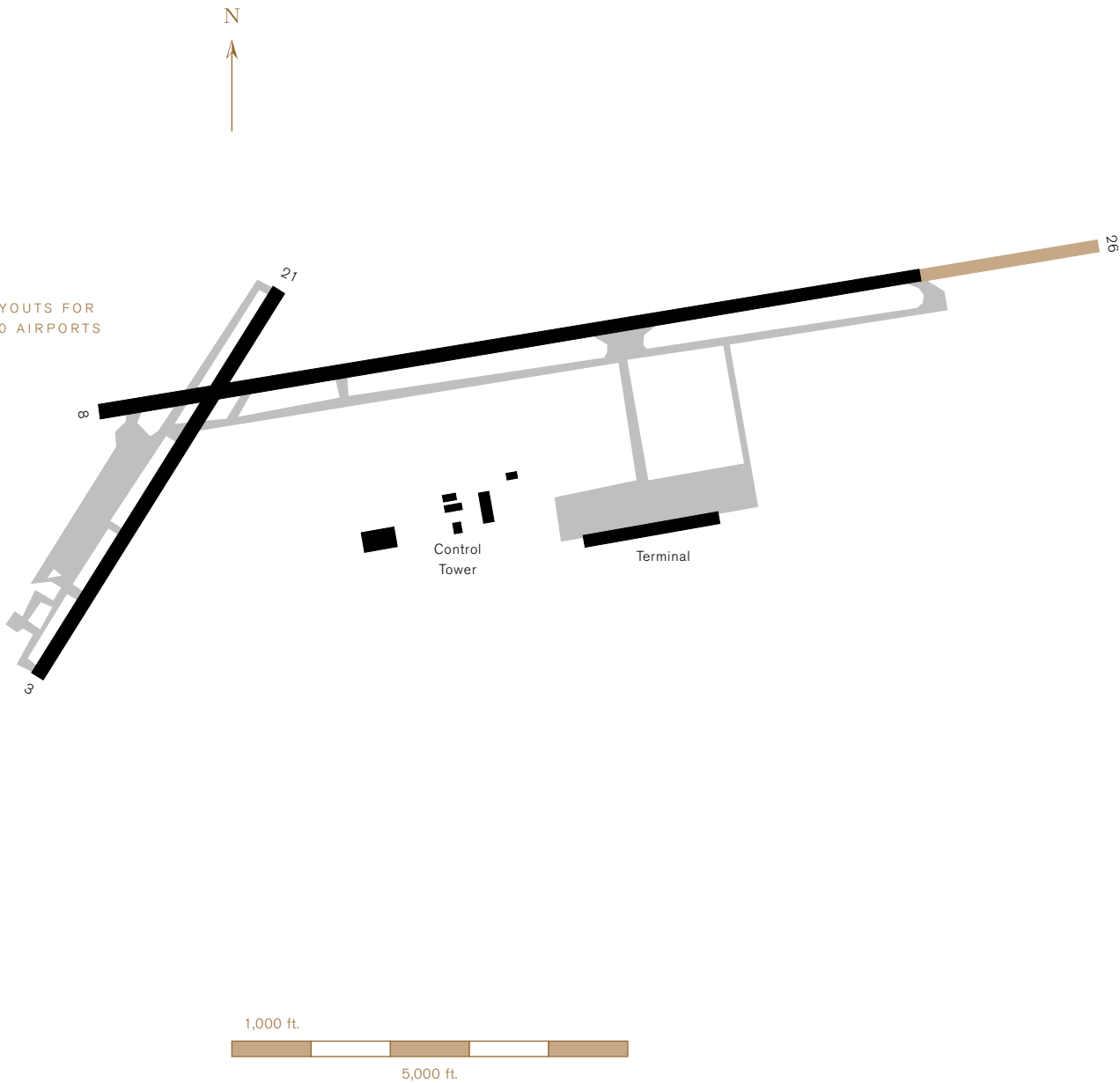
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ITO — HILO INTERNATIONAL AIRPORT

A 2,200 ft. east extension of Runway 8/26 is proposed for development by 2010.

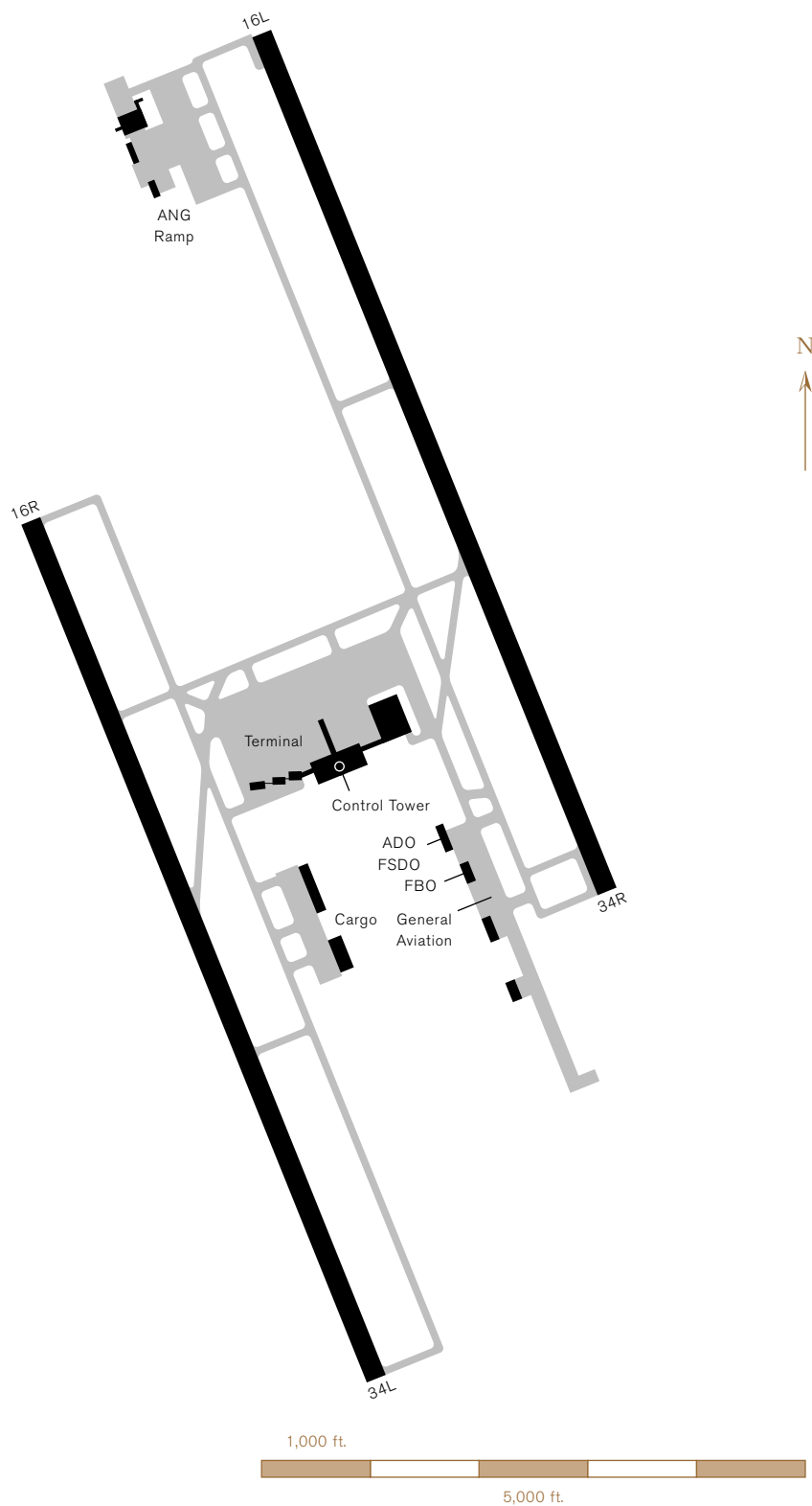
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## JAN — JACKSON INTERNATIONAL AIRPORT

There are no new runway or runway extension projects planned, proposed, or currently under construction at this airport.

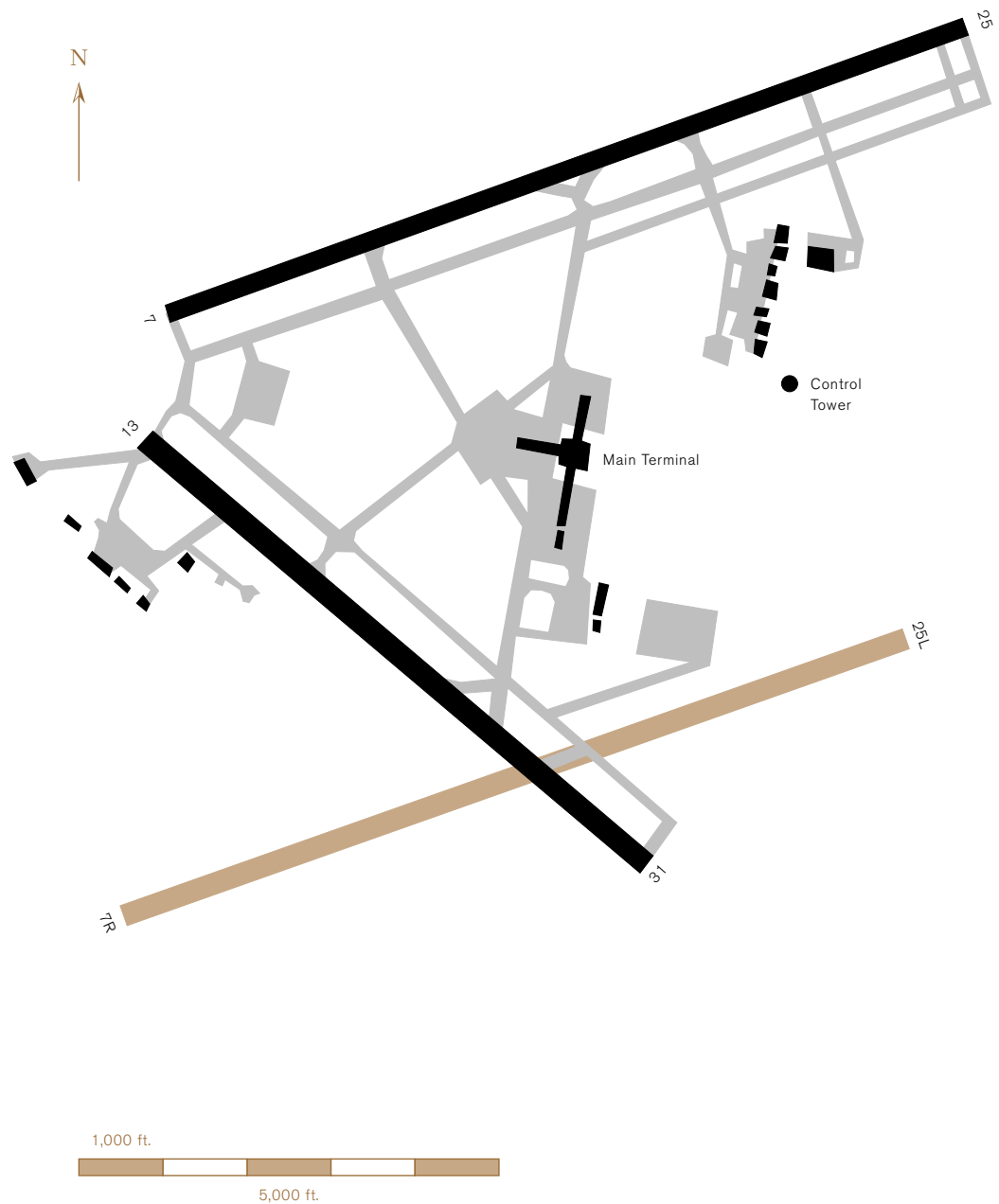


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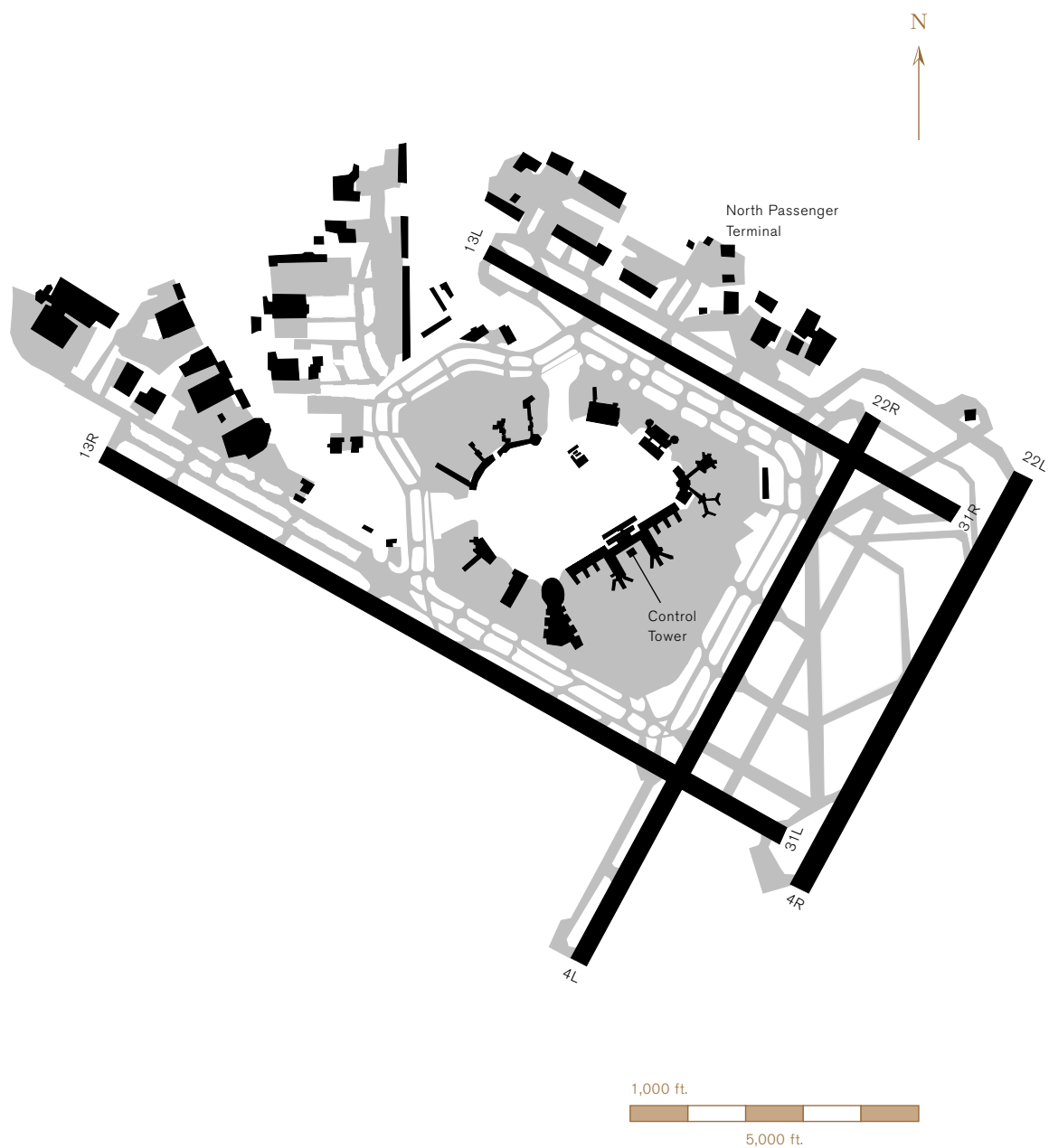
## JAX — JACKSONVILLE INTERNATIONAL AIRPORT

A new parallel Runway 7R/25L is being planned. It will be 6,500 ft. south of the existing Runway 7/25, permitting independent parallel IFR operations and potentially doubling Jacksonville's hourly IFR arrival capacity. Construction is scheduled to begin in 2010, with completion expected in 2011. Estimated cost of construction is \$50 million.



## JFK — NEW YORK JOHN F. KENNEDY INTERNATIONAL AIRPORT

There are no new runway or runway extension projects planned, proposed, or currently under construction at this airport.

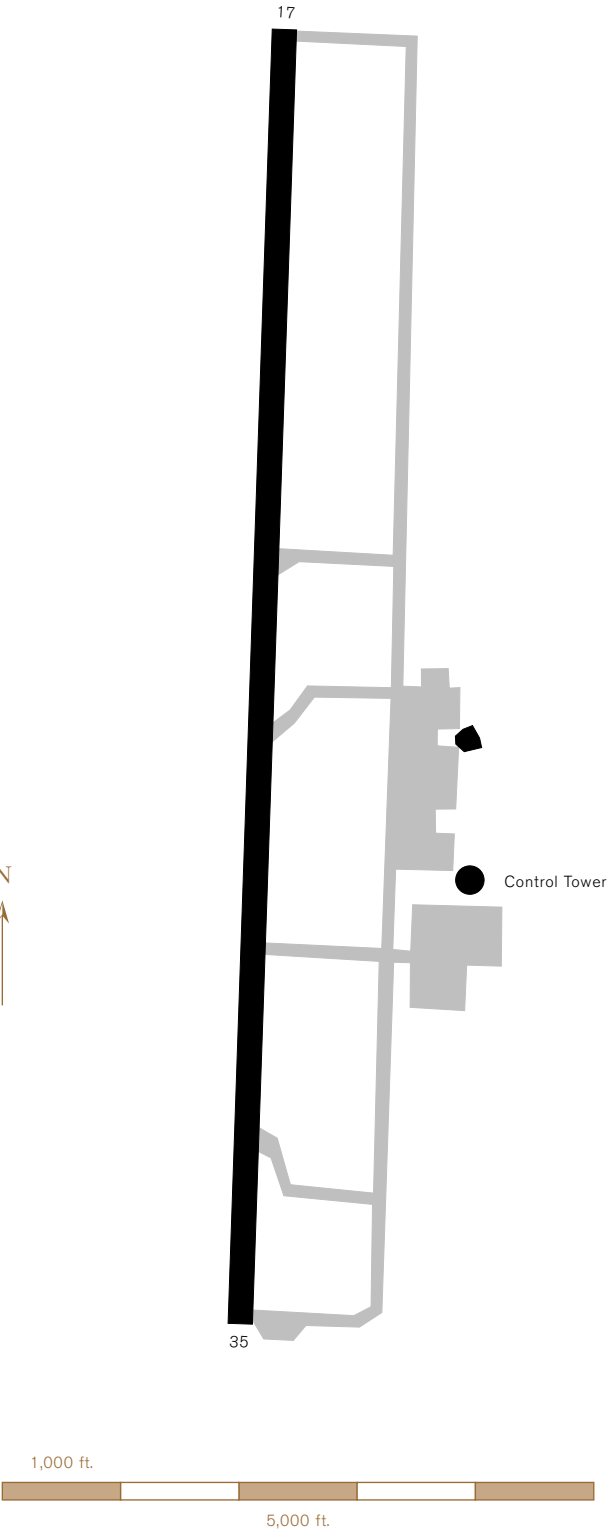


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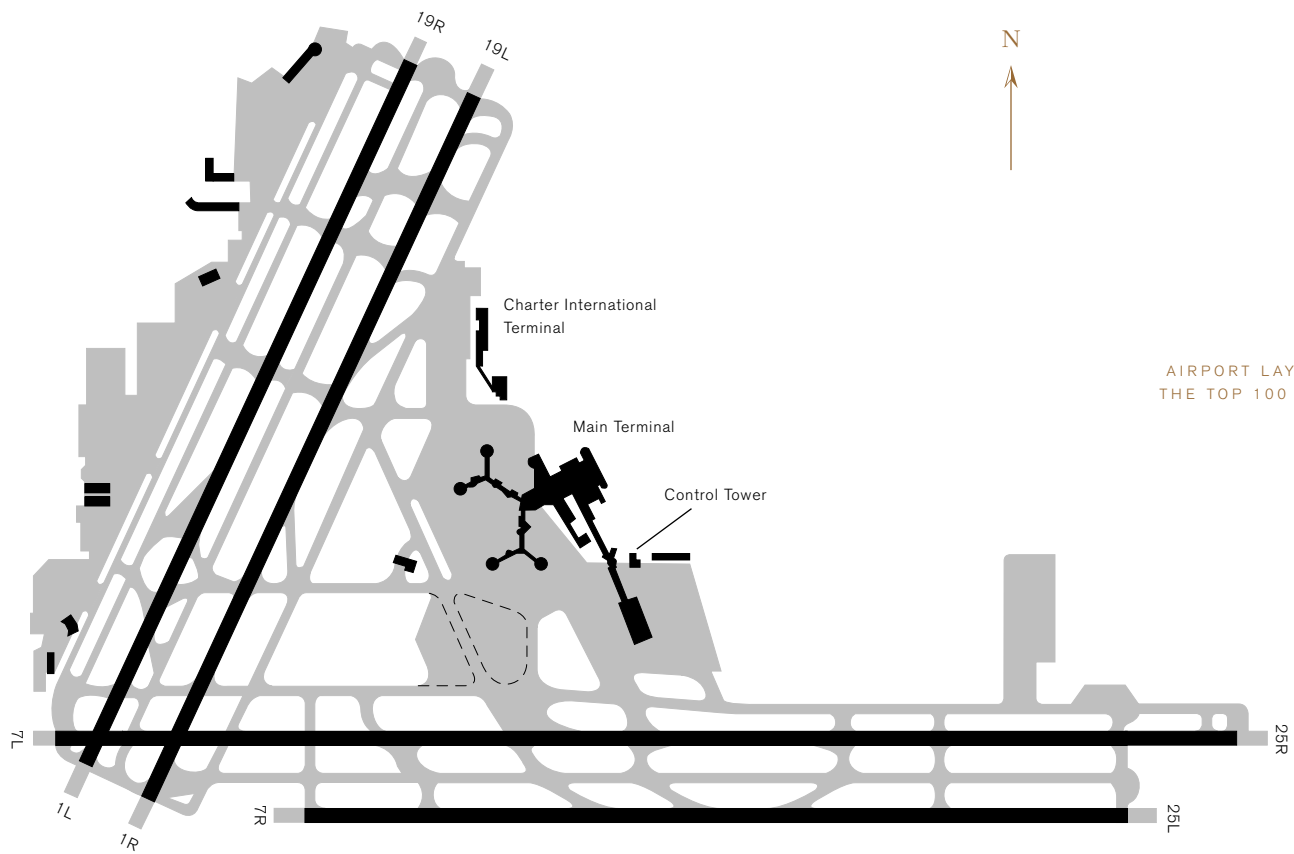
**KOA — KONA INTERNATIONAL AT KEAHOLE**

There are no new runway or runway extension projects planned, proposed, or currently under construction at this airport.



## LAS — LAS VEGAS MCCARRAN INTERNATIONAL AIRPORT

There are no new runway or runway extension projects planned, proposed, or currently under construction at this airport.



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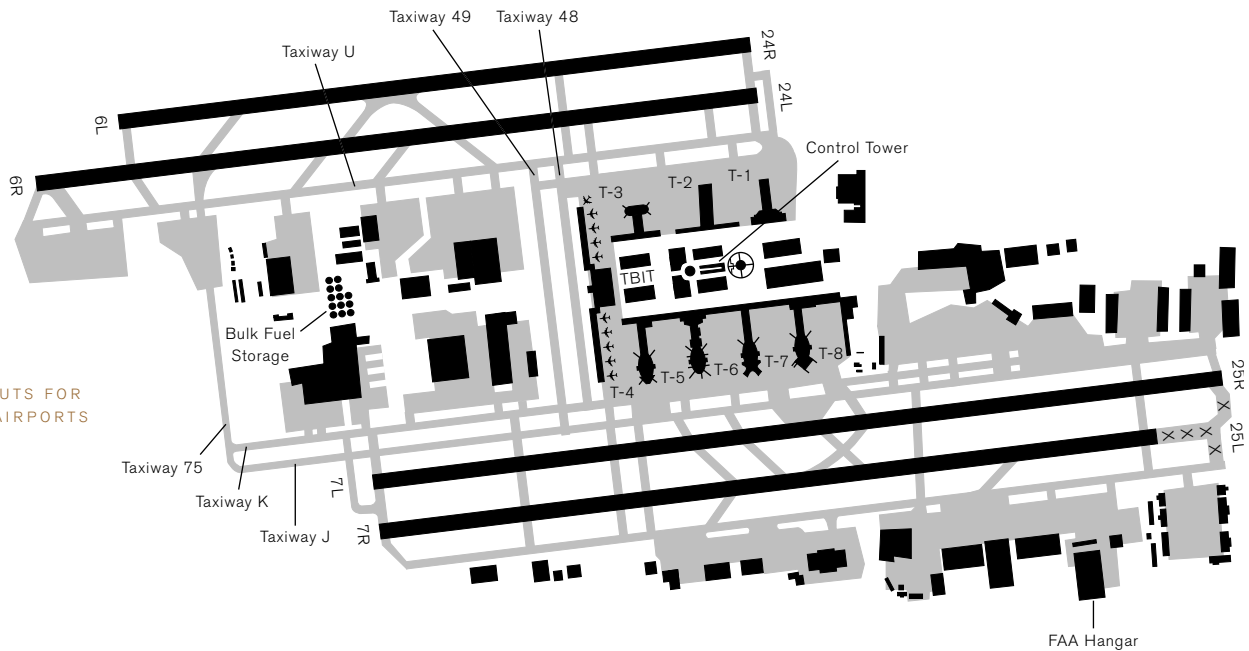
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**LAX – LOS ANGELES INTERNATIONAL AIRPORT**

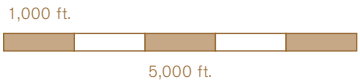
There are no new runway or runway extension projects planned, proposed, or currently under construction at this airport.

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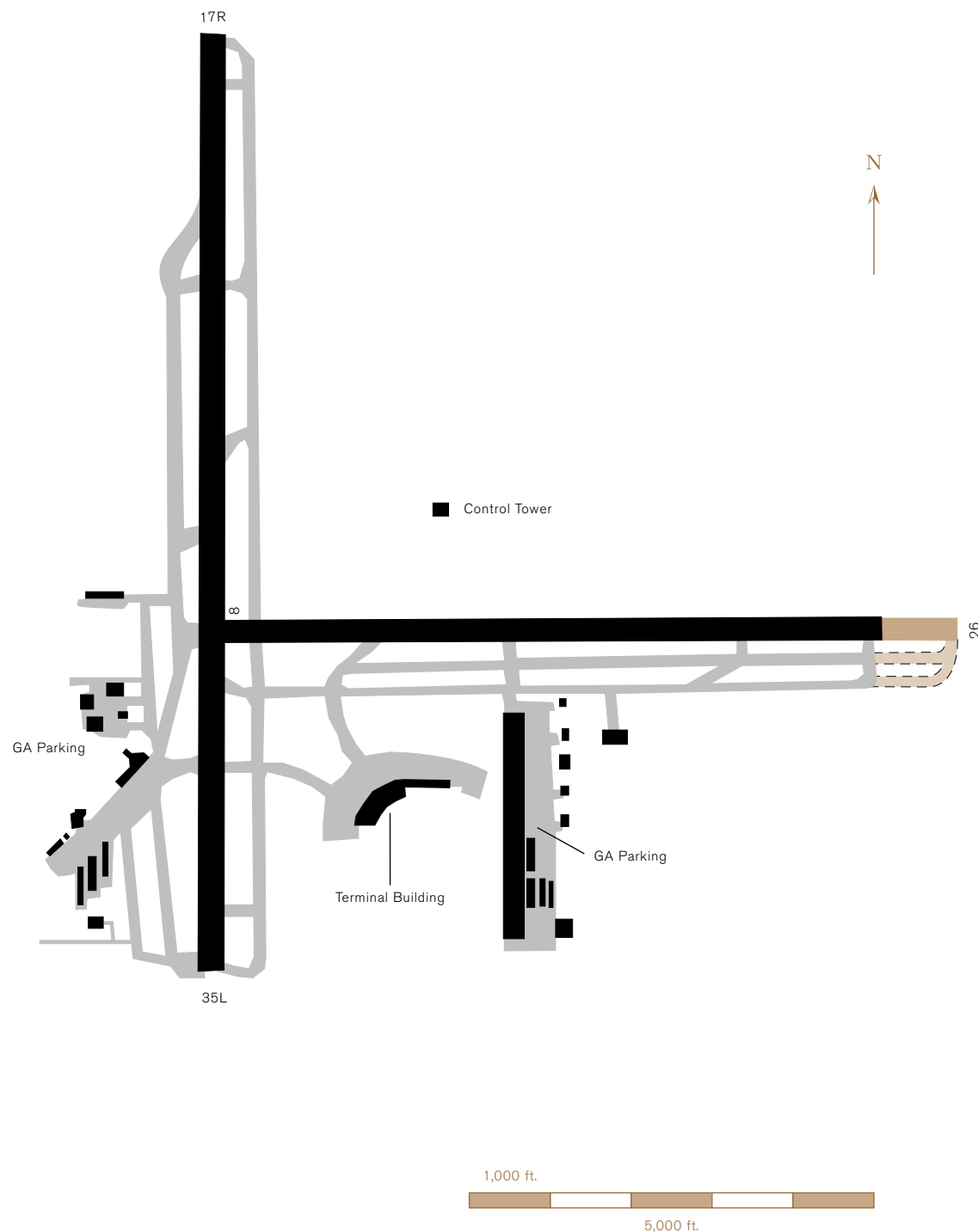
*Note: Some buildings/structures have been removed for clarity*





## LBB – LUBBOCK INTERNATIONAL AIRPORT

An extension to Runway 8/26 is planned. The start of construction is scheduled for 2004 and the estimated cost is \$15 million. It is anticipated that the extension will be operational in 2005.



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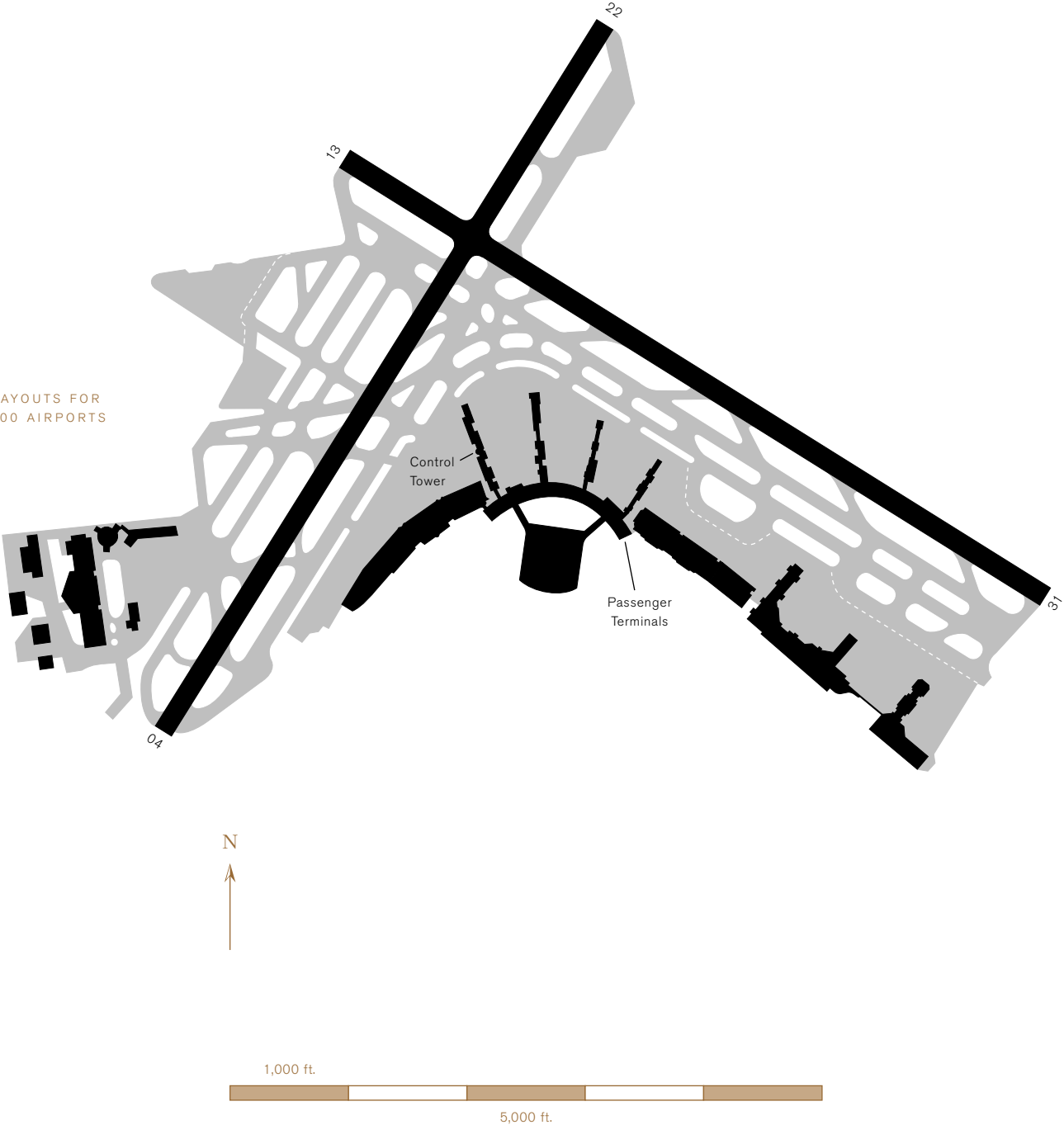
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**LGA — NEW YORK LAGUARDIA AIRPORT**

There are no new runway or runway extension projects planned, proposed, or currently under construction at this airport.

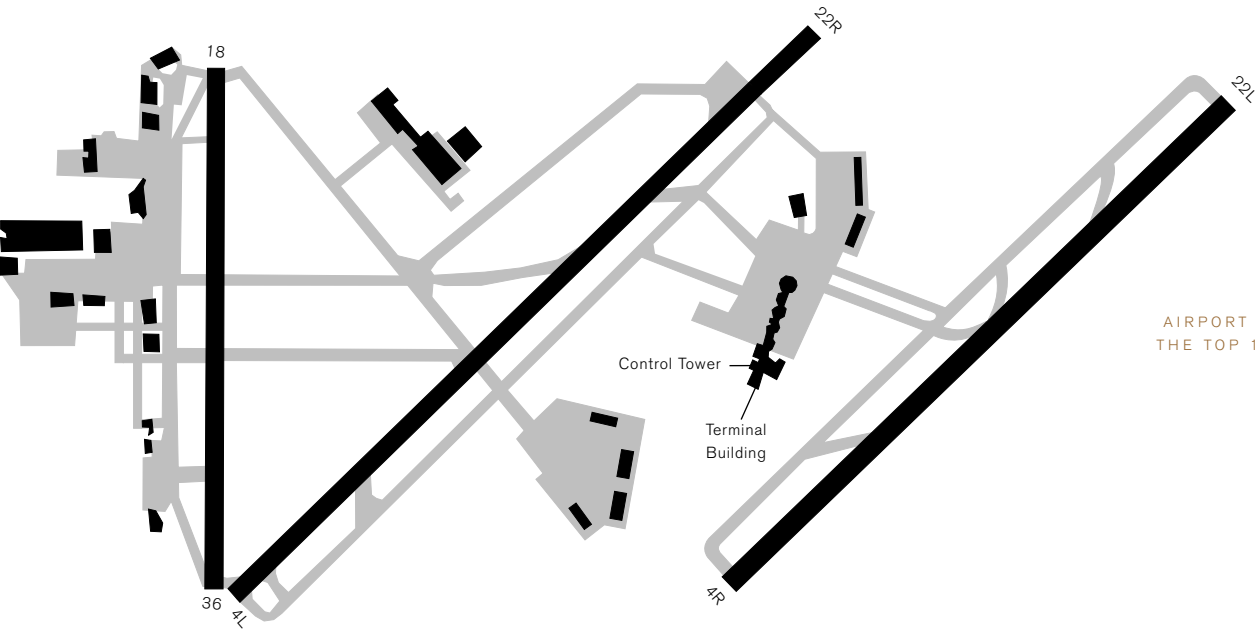
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**LIT – LITTLE ROCK ADAMS FIELD**

An extension of Runway 4L/22R was completed in late 1998.

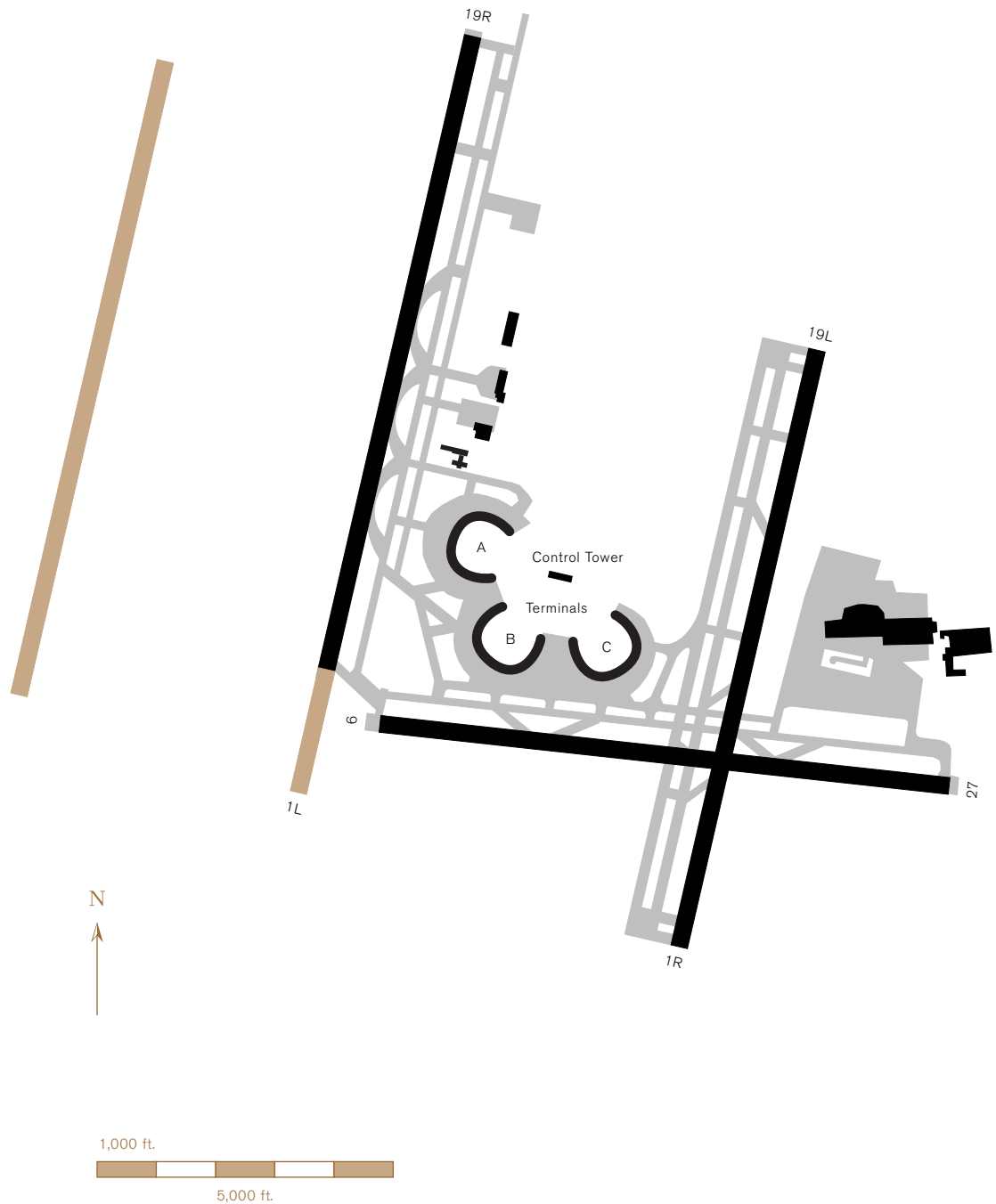


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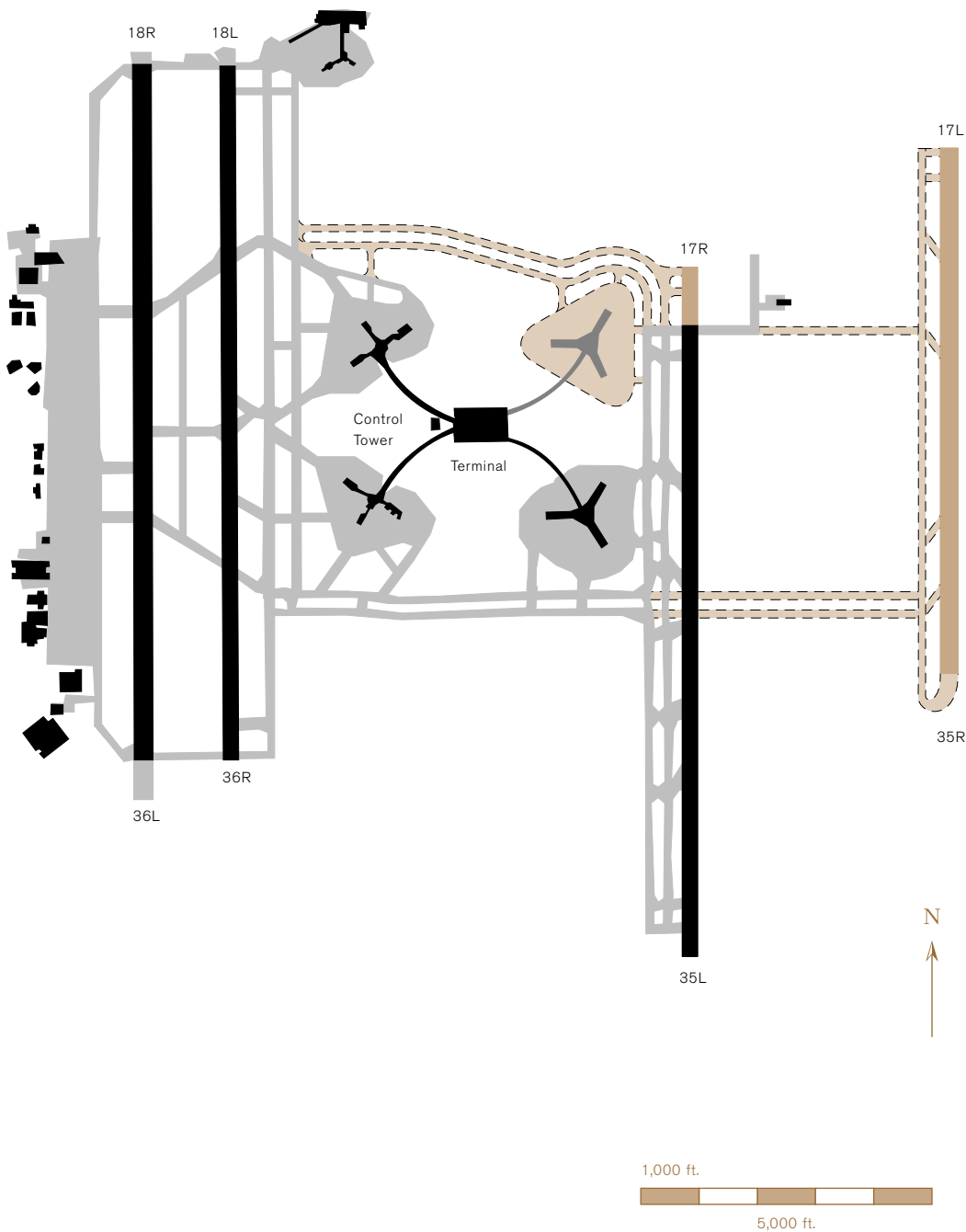
## MCI — KANSAS CITY INTERNATIONAL AIRPORT

In accordance with the Airport Master Plan, an extension of Runway 1L/19R is currently planned. One additional parallel runway west of the existing north-south runway is being considered.



## MCO – ORLANDO INTERNATIONAL AIRPORT

Environmental mitigation for a fourth north-south parallel Runway 17L/35R began October 10, 1990 and is ongoing. The runway is expected to be operational in 2002. It will be located 4,300 ft. east of Runway 17R/35L. This may permit triple independent IFR operations. The estimated cost of construction of this runway is \$115 million. Also planned is a 1,000-ft. extension to Runway 17R/35L. This may prevent aircraft on the planned dual taxiway from obstructing the Runway 17R approach.

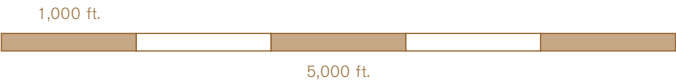
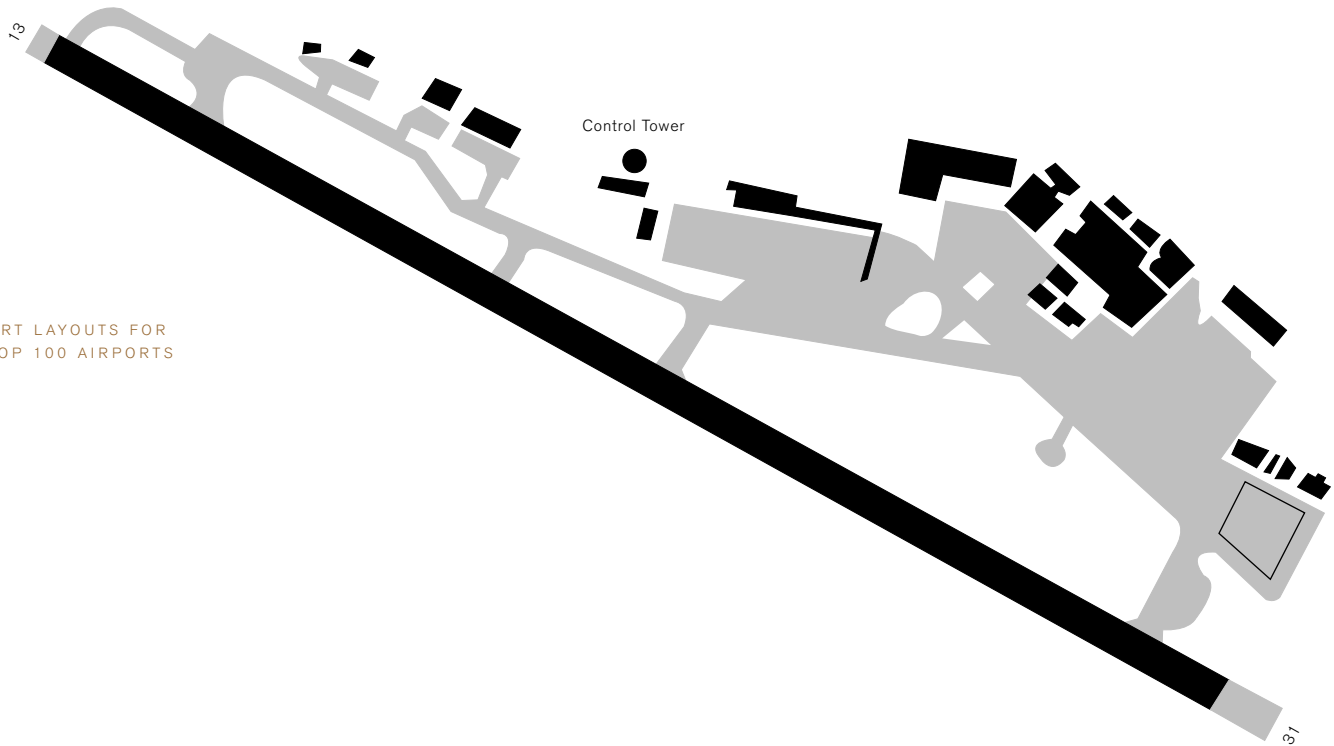


**MDT — HARRISBURG INTERNATIONAL AIRPORT**

There are no new runway or runway extension projects planned, proposed, or currently under construction at this airport.

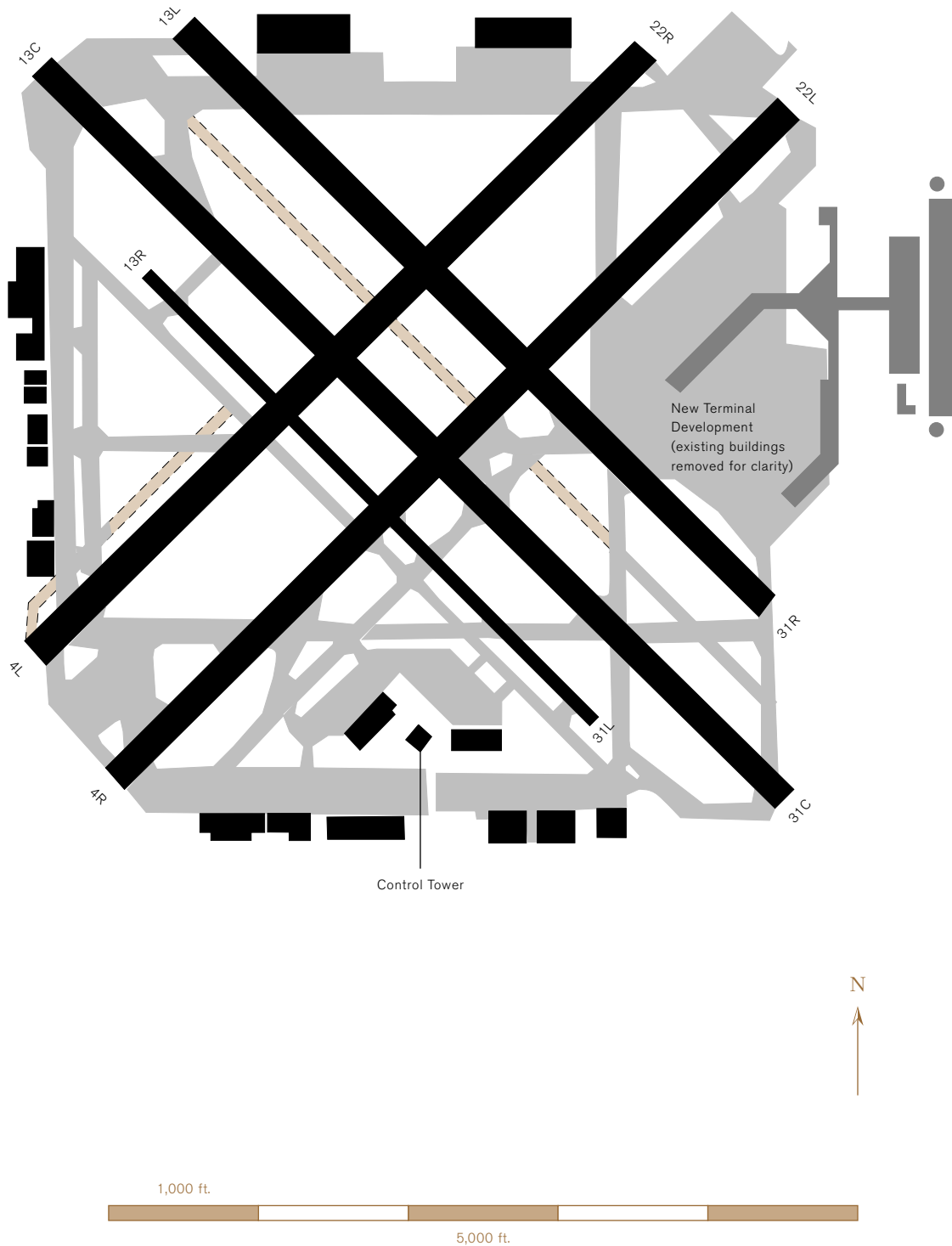
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## MDW — CHICAGO MIDWAY AIRPORT

There are no new runway or runway extension projects planned, proposed, or currently under construction at this airport.

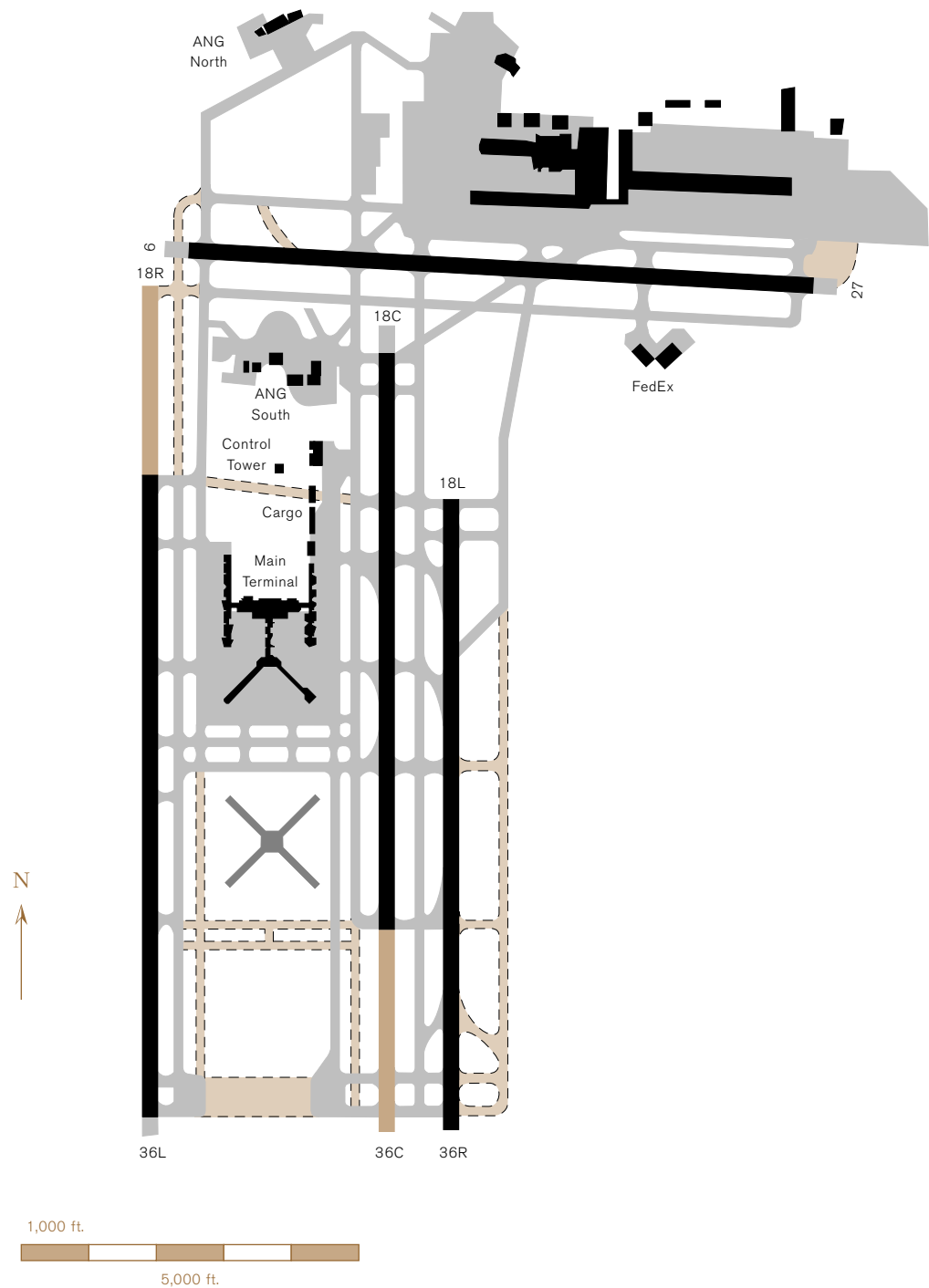


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## MEM — MEMPHIS INTERNATIONAL AIRPORT

A reconstruction and extension of Runway 18C/36C is under way. Construction is expected to be completed by late-2000 at a cost of \$103 million. The extended runway will allow departures by aircraft with heavier payloads and/or greater haul-lengths. Also, an extension of Runway 18R/36L is planned for the future.





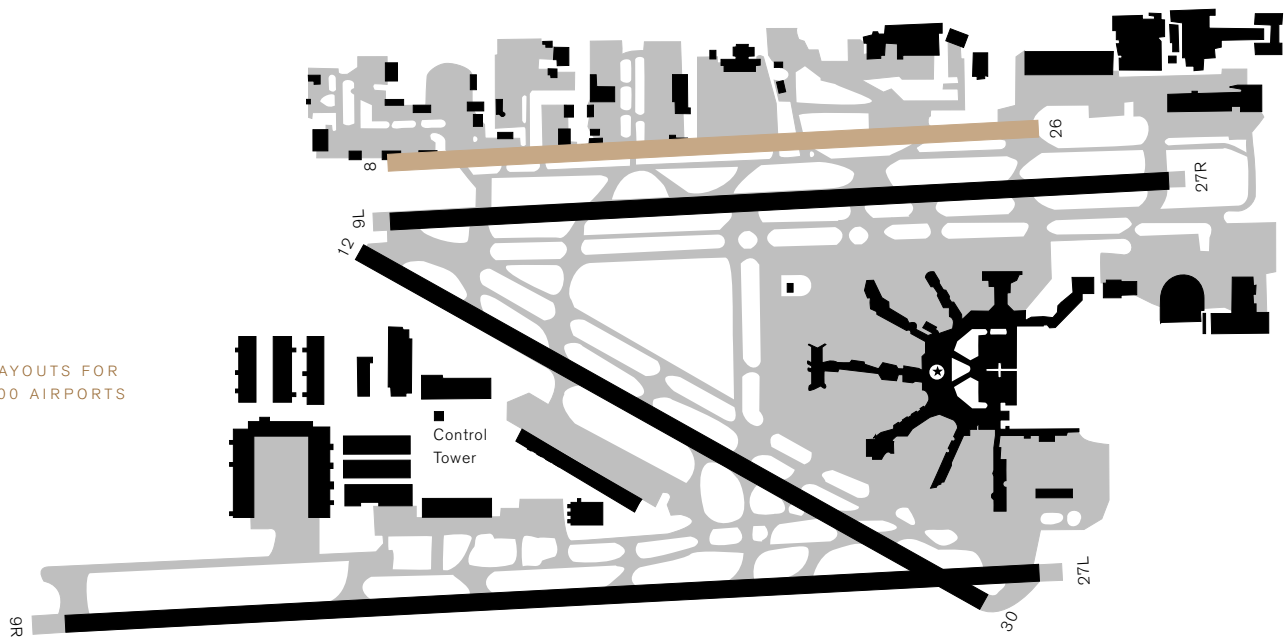
## MHT — MANCHESTER

There are no new runway or runway extension projects planned, proposed, or currently under construction at this airport.

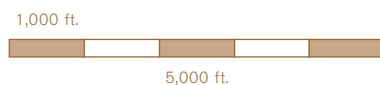
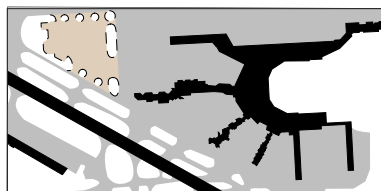


## MIA — MIAMI INTERNATIONAL AIRPORT

Construction of a new air carrier Runway 8/26, 8,600 ft. long and 800 ft. north of existing Runway 9L/27R, is expected to start in 2000 and be completed by 2002. The estimated cost of construction is \$206 million. An EIS WAS completed in December 1998. The new runway is planned for use primarily as an arrival runway in VFR and non-precision IFR conditions.

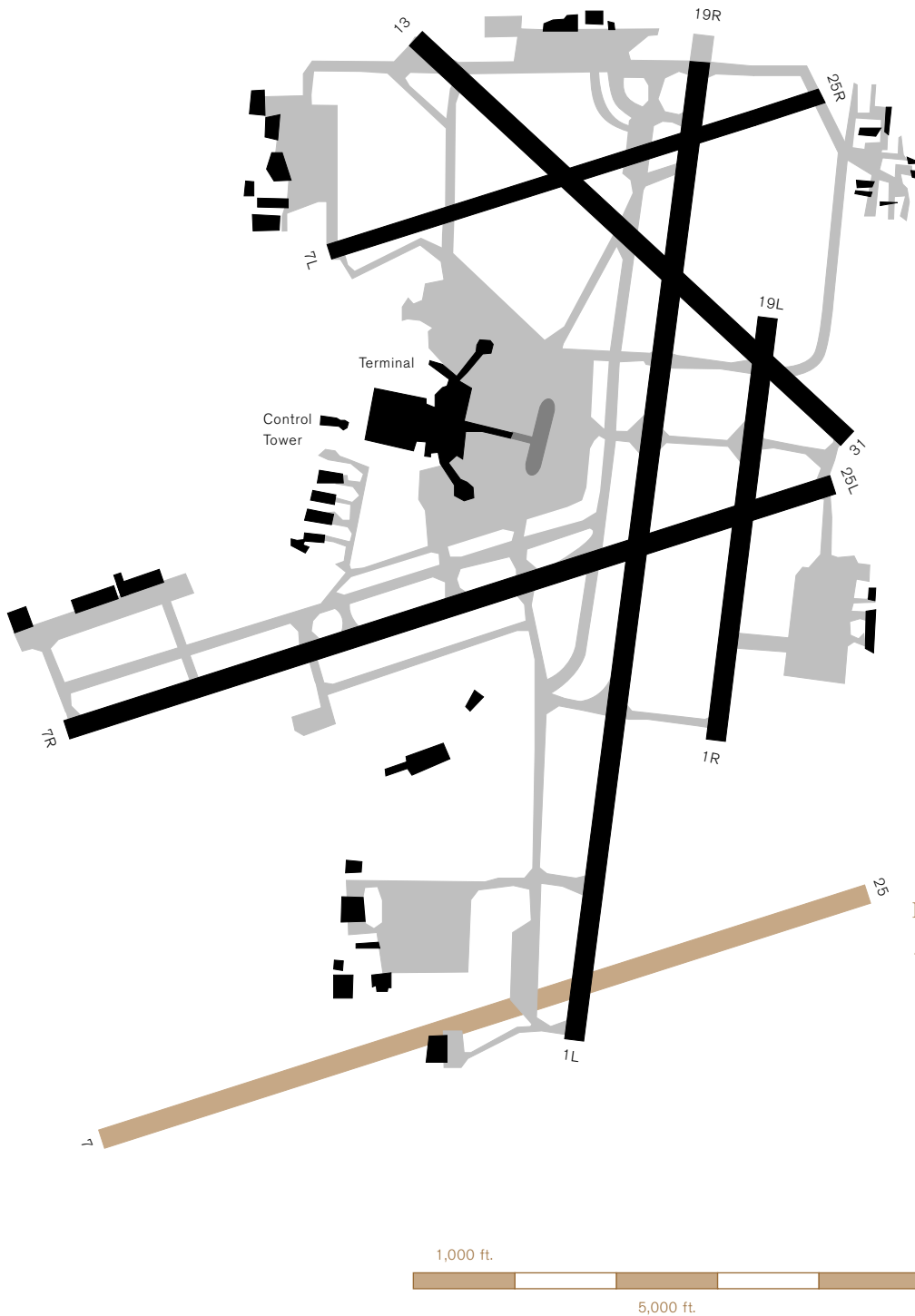


New Terminal Design and Mid-Field Hold Pad



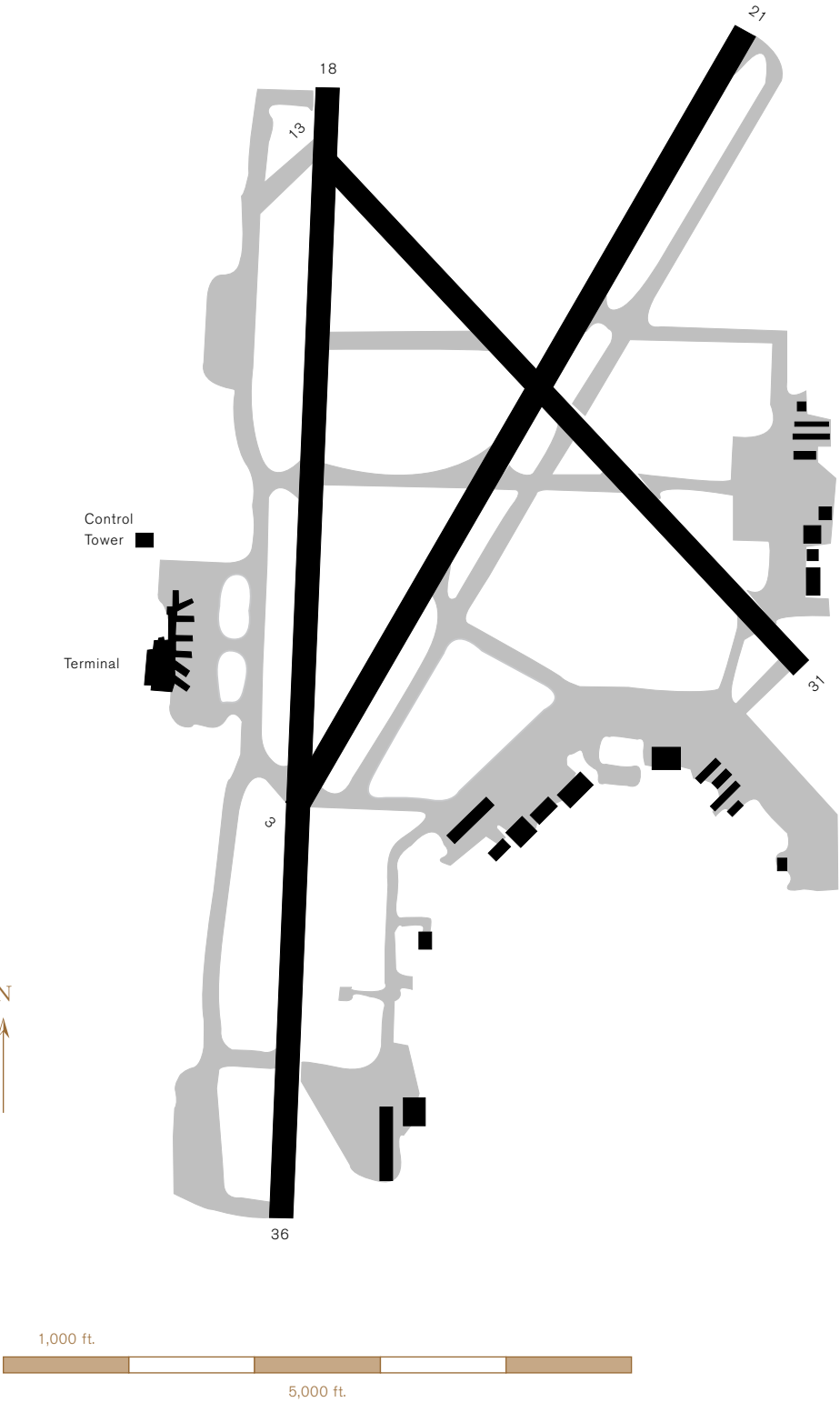
## MKE — MILWAUKEE GENERAL MITCHELL INTERNATIONAL AIRPORT

A 700-ft. extension to Runway 7L/25R was completed in the summer of 1998. Extension of this runway from 4,100 ft. to 4,800 ft. will accommodate commuter aircraft and delay the need for a third parallel runway until about the year 2015. Anticipated cost of the runway extension is approximately \$1.9 million.



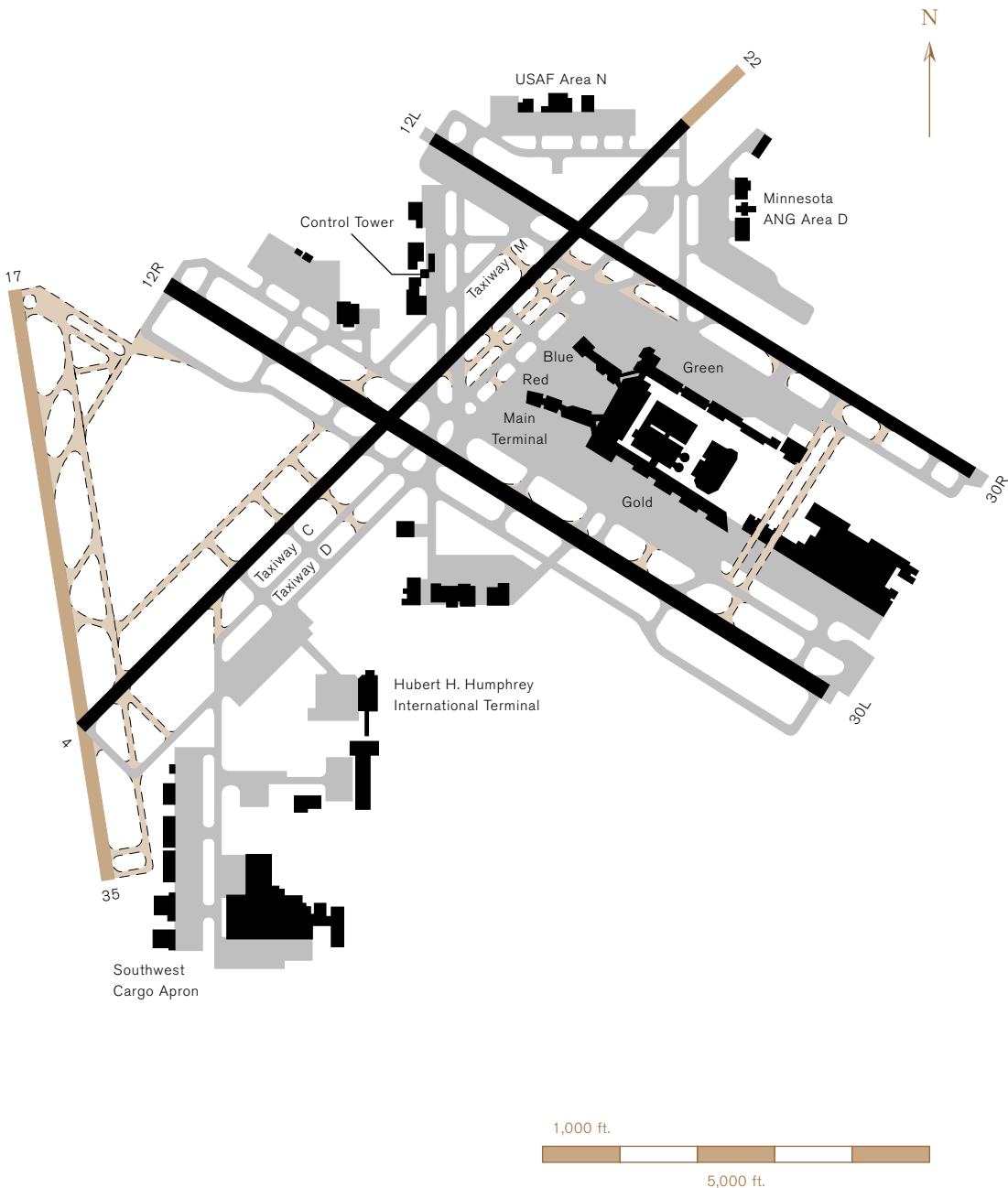
**MSN –MADISON/DANE COUNTY REGIONAL AIRPORT**

There are no new runway or runway extension projects planned, proposed, or currently under construction at this airport.



## MSP — MINNEAPOLIS-ST. PAUL INTERNATIONAL AIRPORT

Construction of the proposed 8,000 ft. Runway 17/35, at a cost of \$490 million, will reduce the projected 2020 annual delay cost from \$66 million to \$38 million. The runway is expected to be operational in 2003 and will be used primarily for departures to the south and arrivals from the north. Construction of a 1,000 ft. extension to the north-east end of Runway 4/22, at a cost of \$7 million, is planned to enhance non-stop flights to Hong Kong. The extension is to be operational in late 2001.

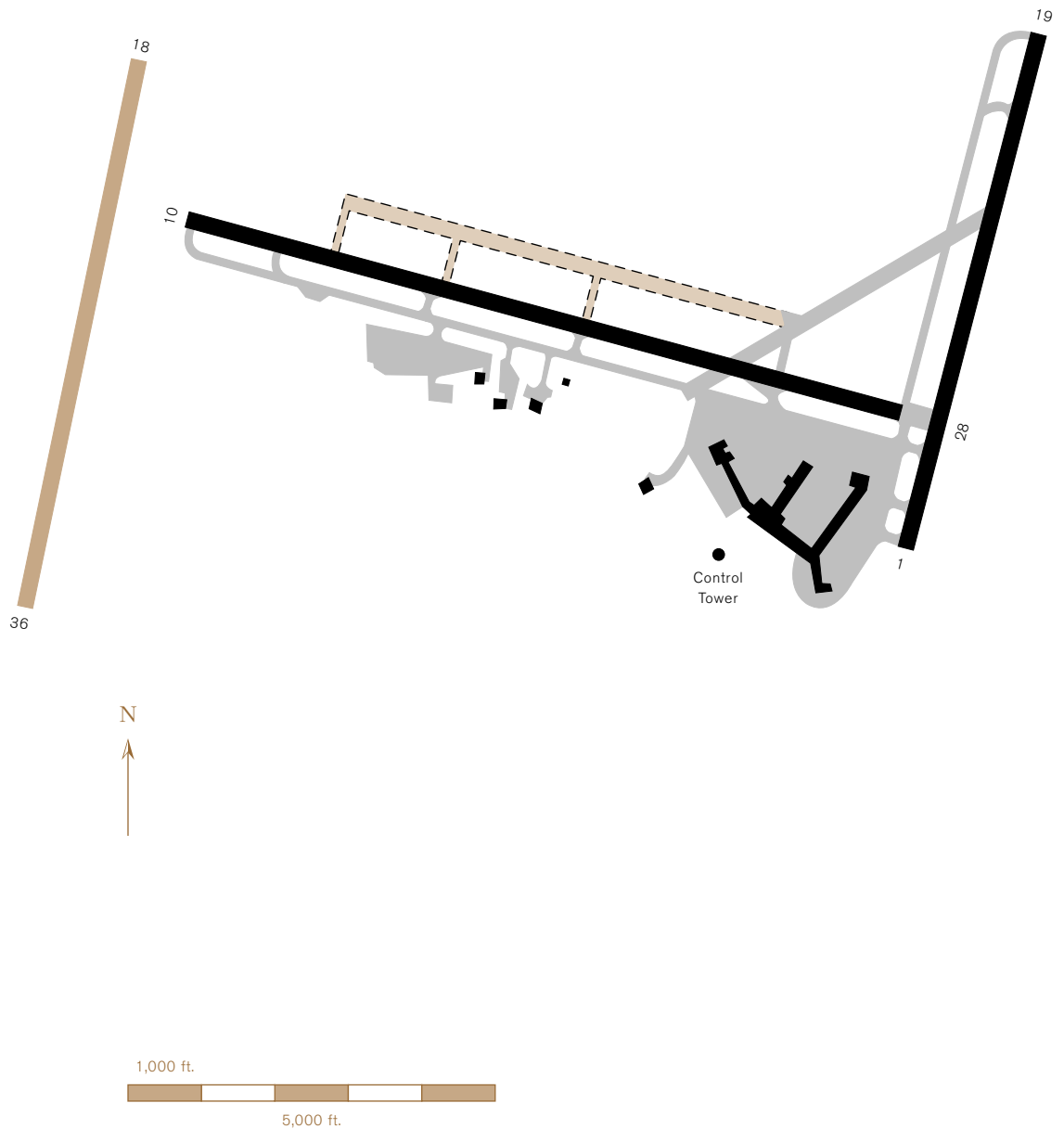


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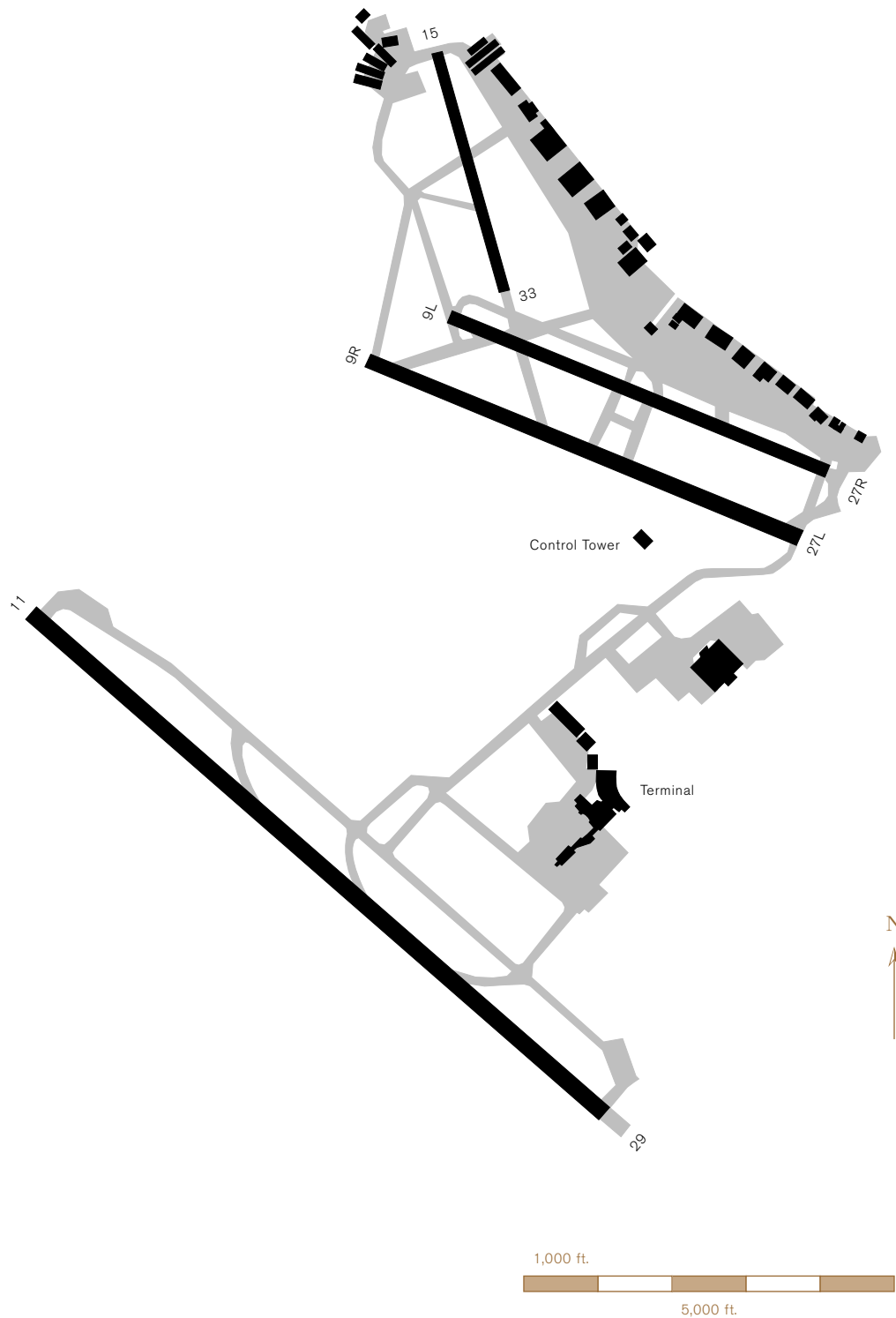
### MSY — NEW ORLEANS INTERNATIONAL AIRPORT

A new north-south Runway 18/36, is planned. This new runway will be nearly parallel to the existing Runway 1/19 and will be located west of the threshold of Runway 10, approximately 11,000 ft. away from Runway 1/19. Pending environmental findings and funding availability, it is expected that the runway will be completed around 2010.



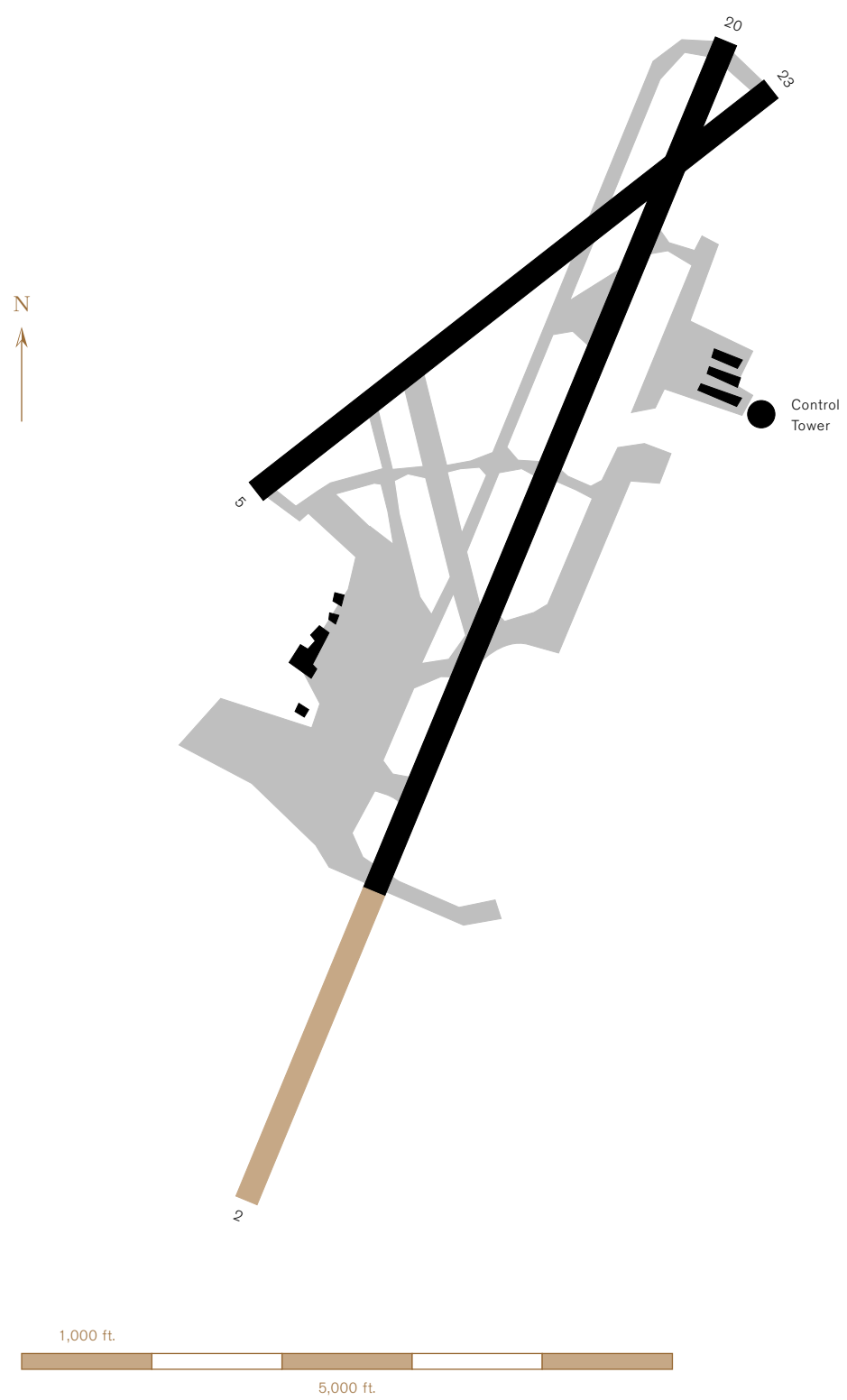
## OAK — METROPOLITAN OAKLAND INTERNATIONAL AIRPORT

There are no new runway or runway extension projects planned, proposed, or currently under construction at this airport.



**OGG – KAHULUI AIRPORT**

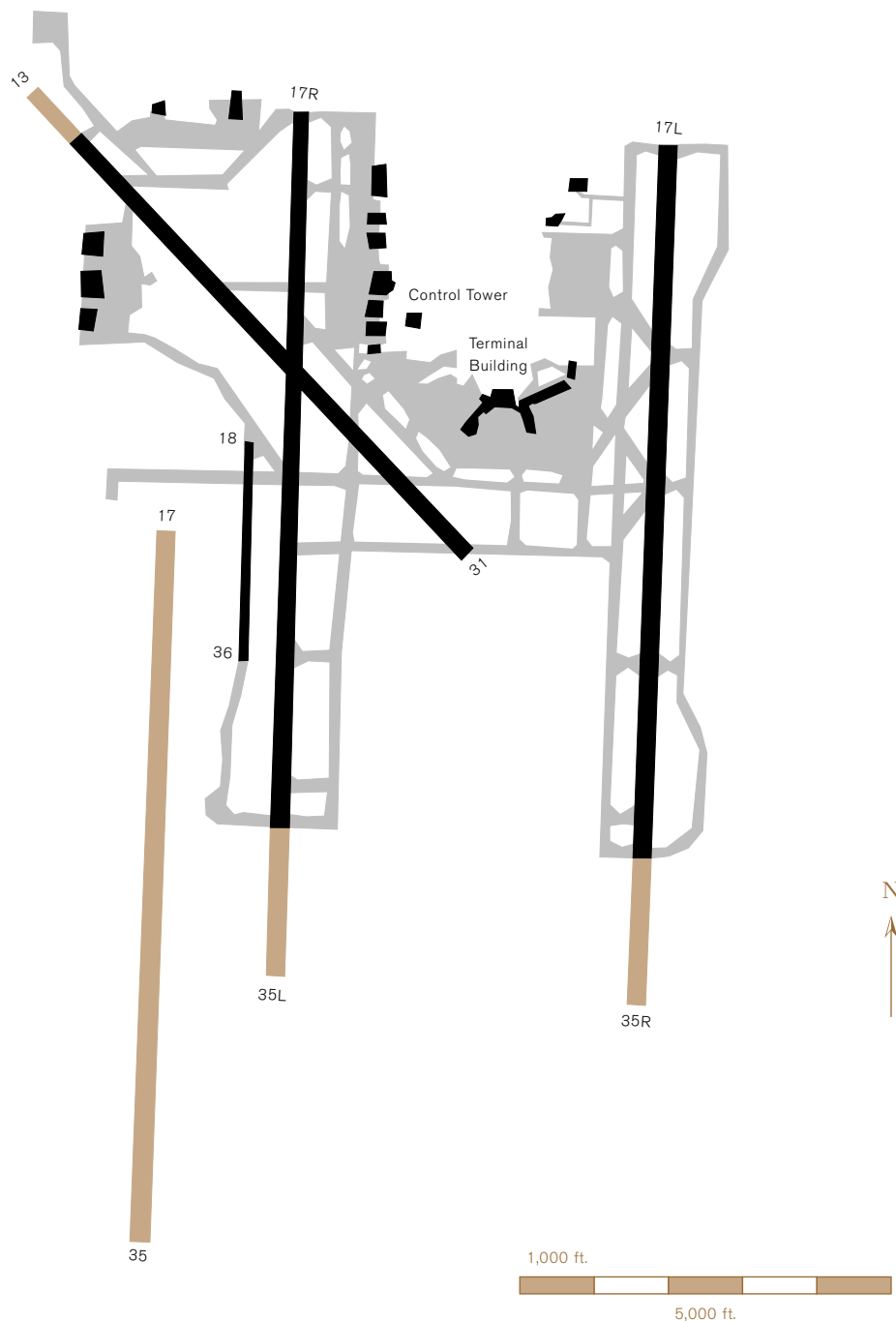
An extension of Runway 2/20 is being planned. An EIS has been completed, and the extension could be operational by 2001, at a cost of \$47 million.





## OKC — OKLAHOMA CITY WILL ROGERS WORLD AIRPORT

Construction of a new west parallel runway 1,600 ft. west of Runway 17/35 is reflected on the ALP. Estimated cost of construction is \$13 million. Extensions to both north/south runways, Runways 17L/35R and 17R/35L, are also planned. The estimated cost of extending the runways is \$8 million each. Construction of the extension to Runway 17R/35L is expected to start in 2010 and be completed by 2014. A 2,200 ft. extension to the northwest of Runway 13/31 is planned as well. Relocation of MacArthur Boulevard may begin in 2003, with completion of the runway extension in 2010. The cost is estimated at \$11.2 million.

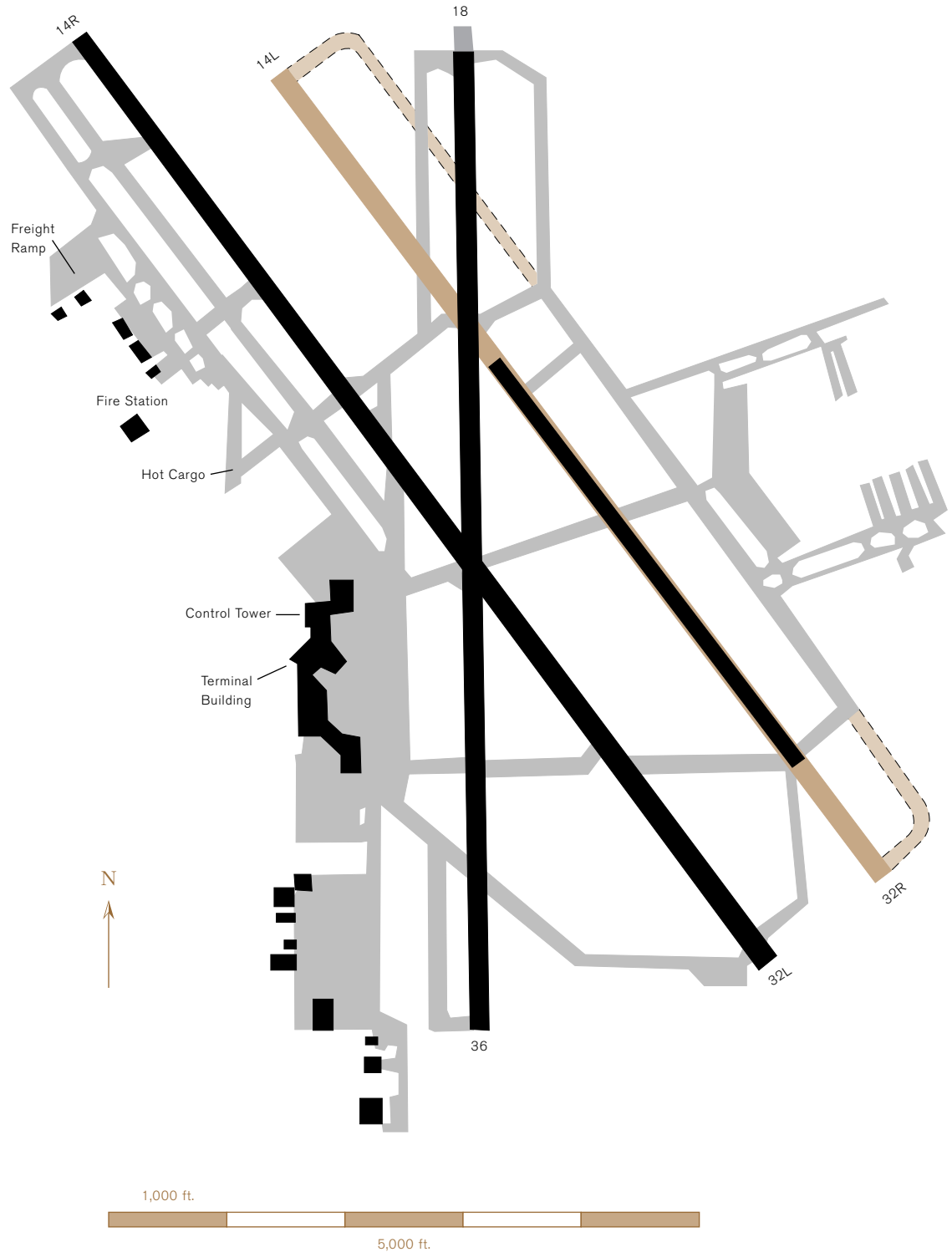


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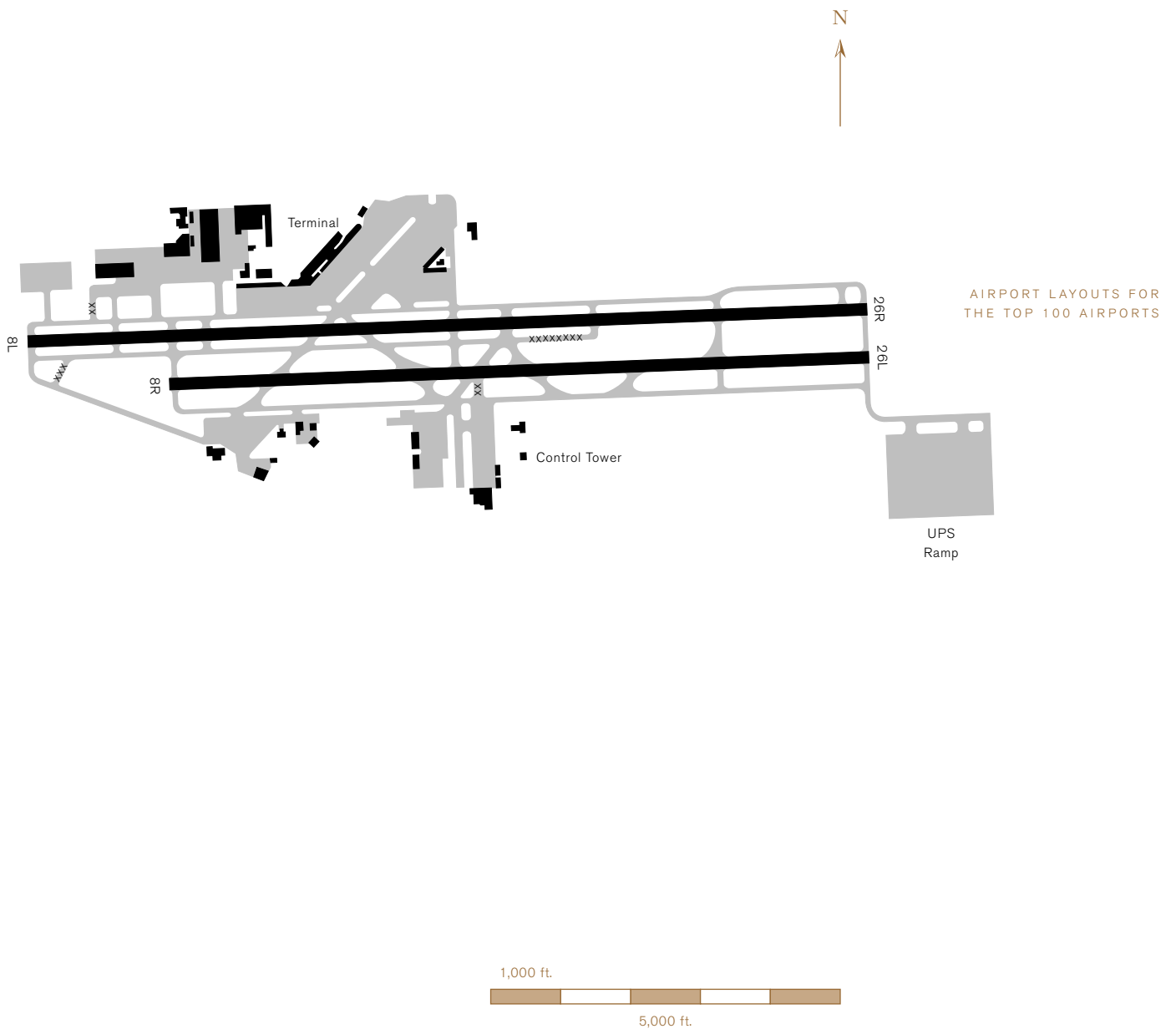
## OMA — OMAHA EPPLEY AIRFIELD

A 1,000-ft. extension to Runway 32R and a 3,400 ft. extension to Runway 14L are planned. No estimates of cost or completion dates are available at this time.



## ONT — ONTARIO INTERNATIONAL AIRPORT

There are no new runway or runway extension projects planned, proposed, or currently under construction at this airport.

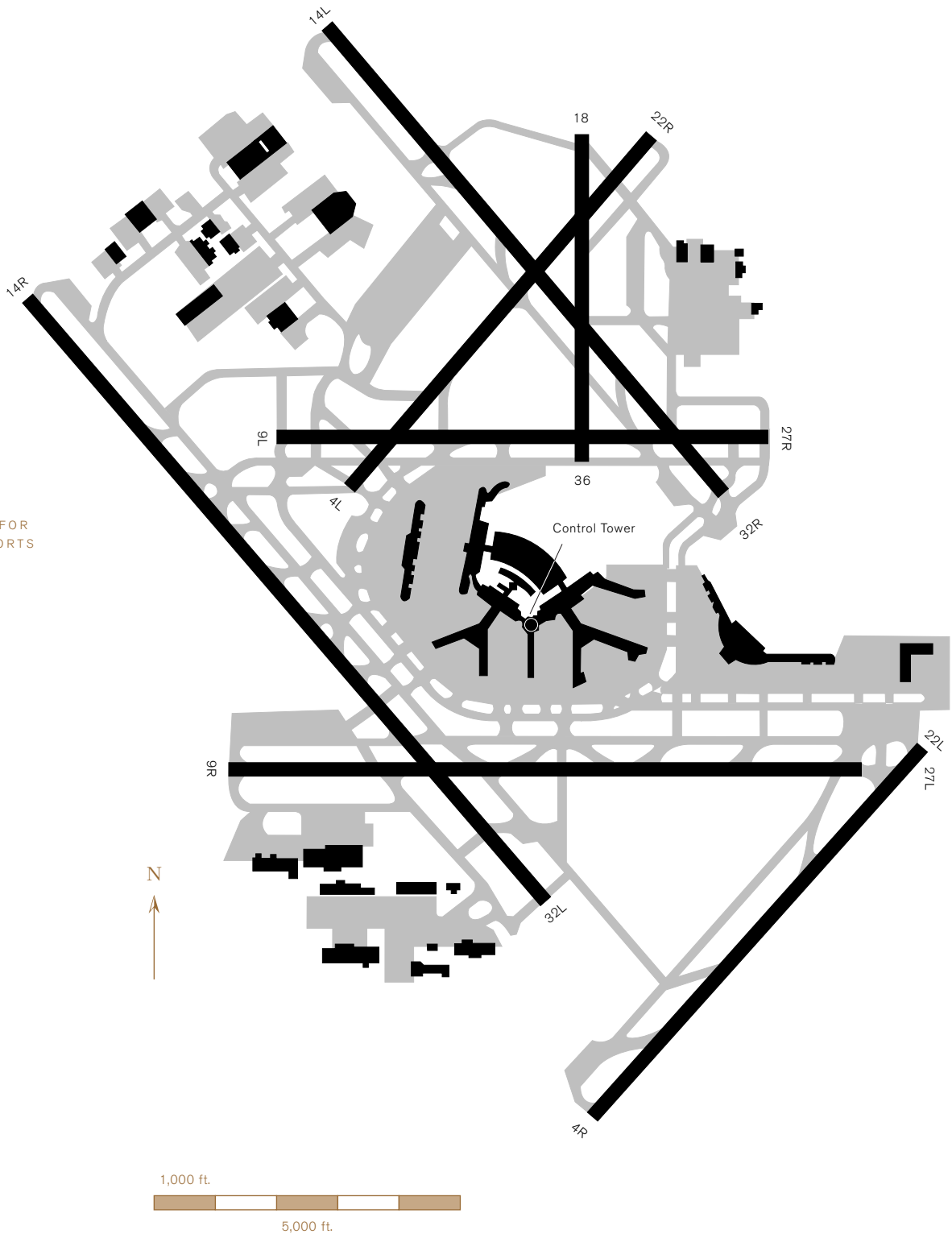


**ORD — CHICAGO O'HARE INTERNATIONAL AIRPORT**

There are no new runway or runway extension projects planned, proposed, or currently under construction at this airport.

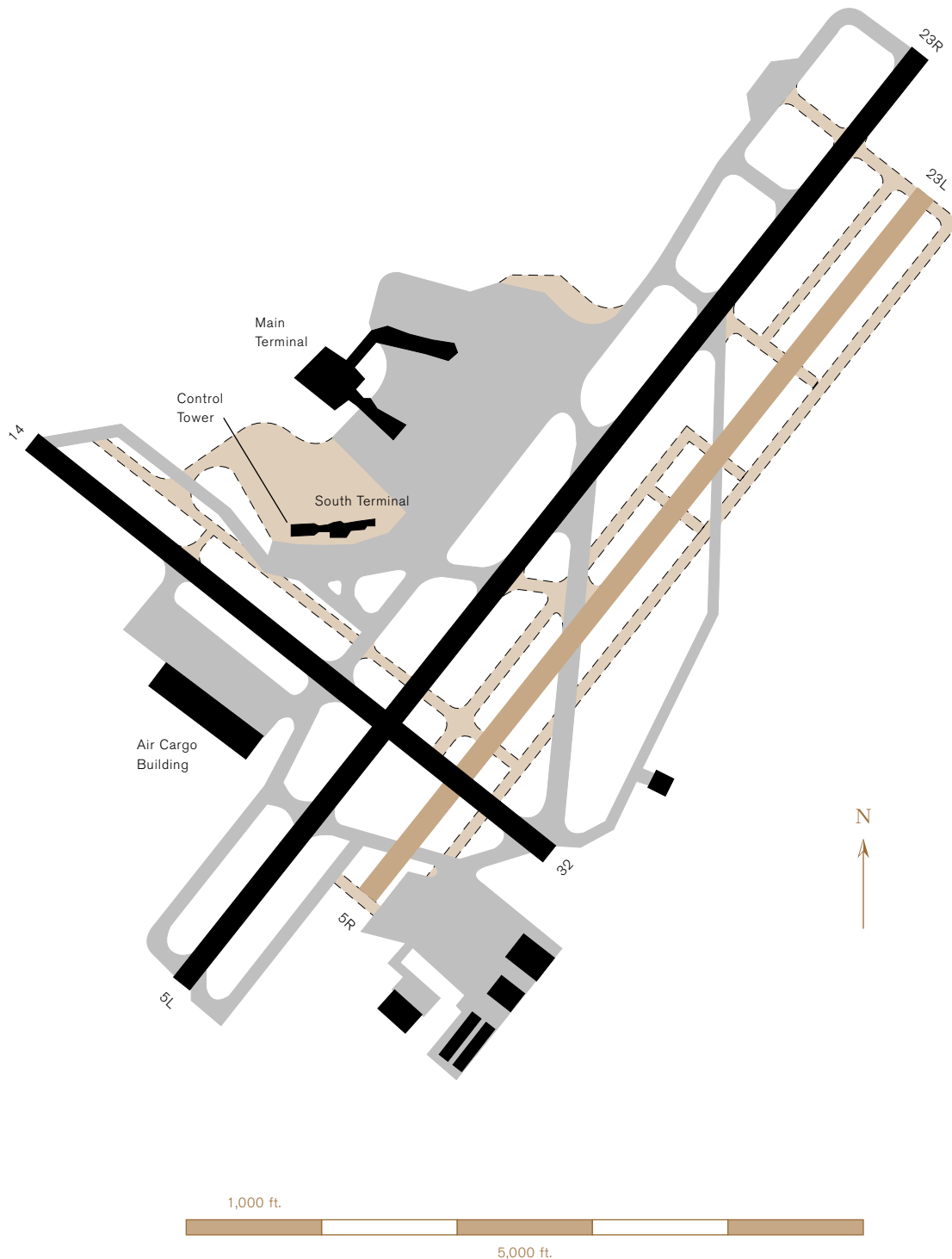
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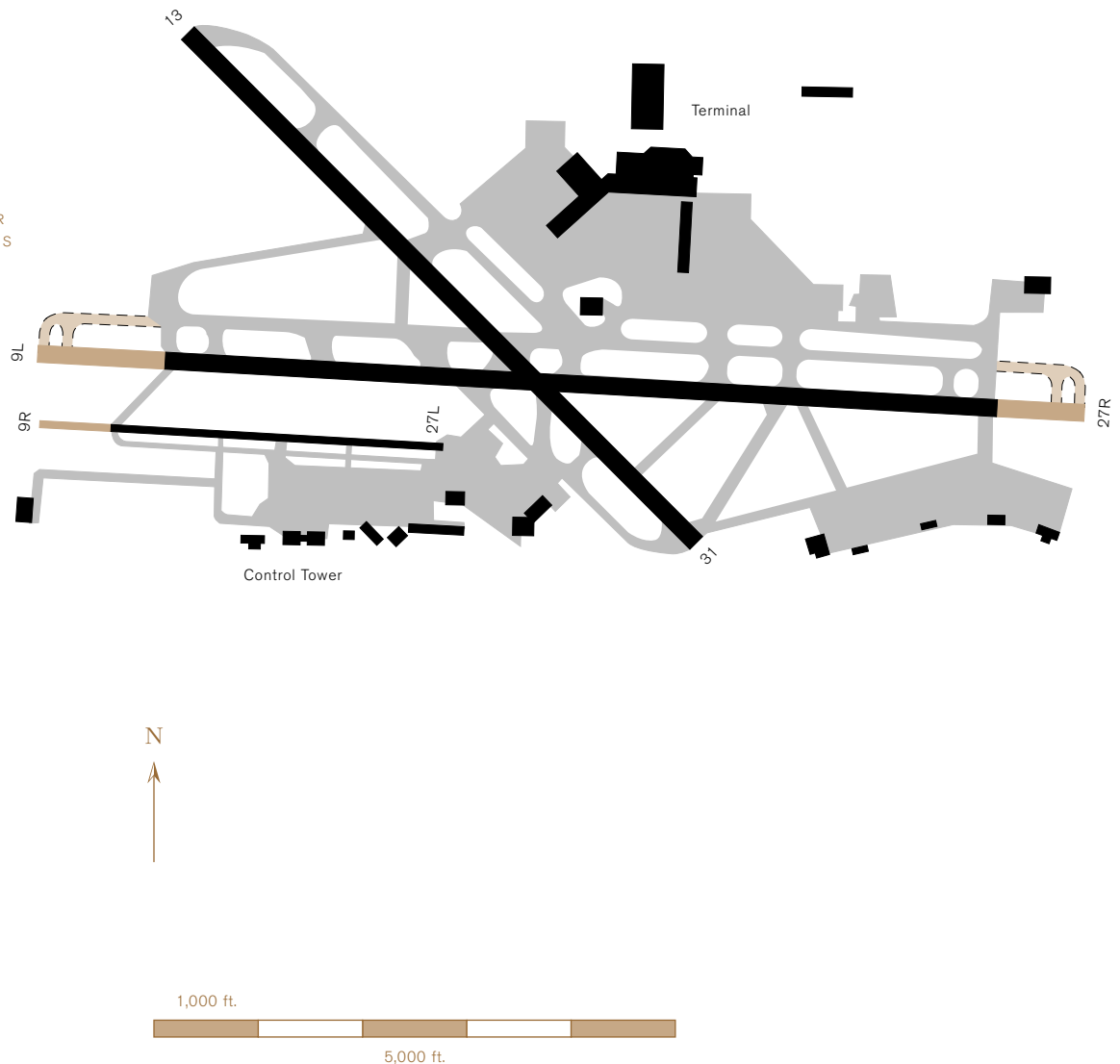
## ORF — NORFOLK INTERNATIONAL AIRPORT

A new air carrier runway, Runway 5R/23L, was analyzed by the Eastern Virginia Capacity Design Team. A Master Plan Update is currently underway. The runway could be operational by 2005, at an estimated cost of \$100 million, providing the airport can acquire the small amount of additional land required.



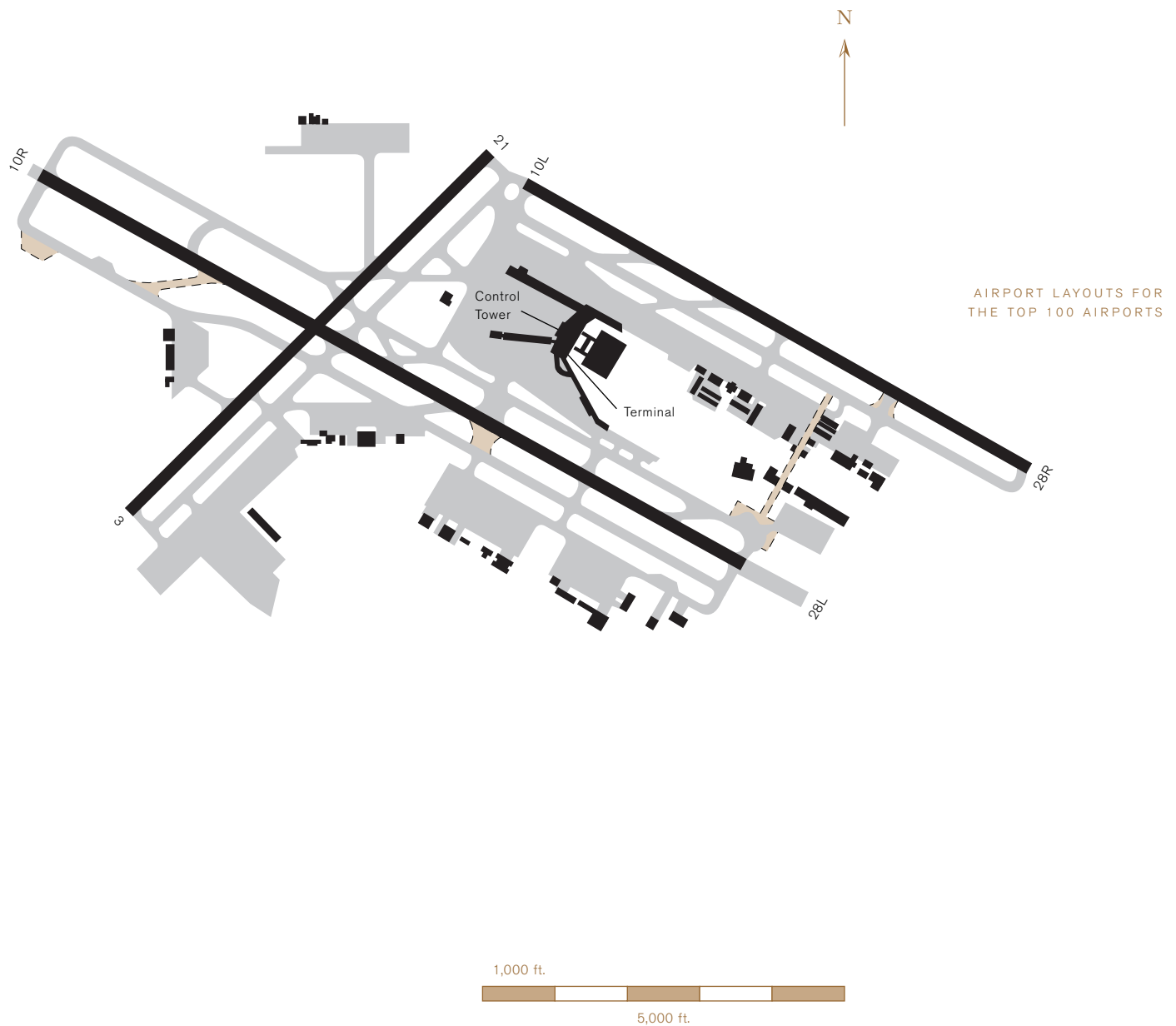
### PBI — PALM BEACH INTERNATIONAL AIRPORT

Runway 9L/27R is planned to be extended 1,200 ft. to the west and 811 ft. to the east, for a total length of 10,000 ft. The total estimated project cost is \$9 million. An environmental assessment was completed and a Finding of No Significant Impact (FONSI) was issued in April 1998. Construction started in 1999 and is expected to be completed in 2000. The runway thresholds will remain in their present locations; therefore, the extended length will only be used for departures.



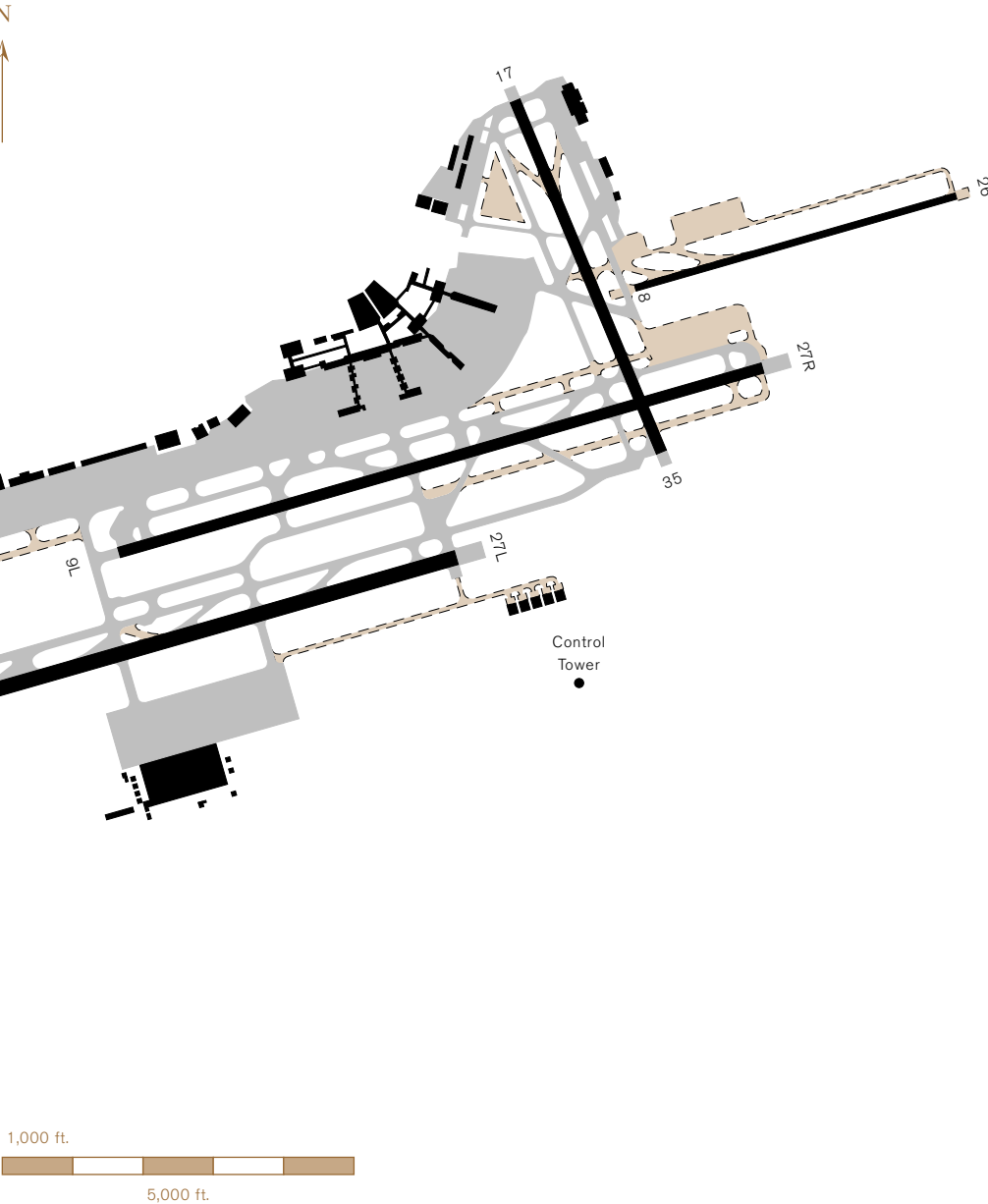
## PDX — PORTLAND INTERNATIONAL AIRPORT

As a result of the 1996 Capacity Enhancement Plan, two new high-speed taxiway exits along Taxiway B were constructed, and two exits along Taxiway C will be constructed in the future. A north/south taxiway is also recommended to connect the east ends of the parallel runways. Installation of an ILS on 28L is planned in 1999.



**PHL – PHILADELPHIA INTERNATIONAL AIRPORT**

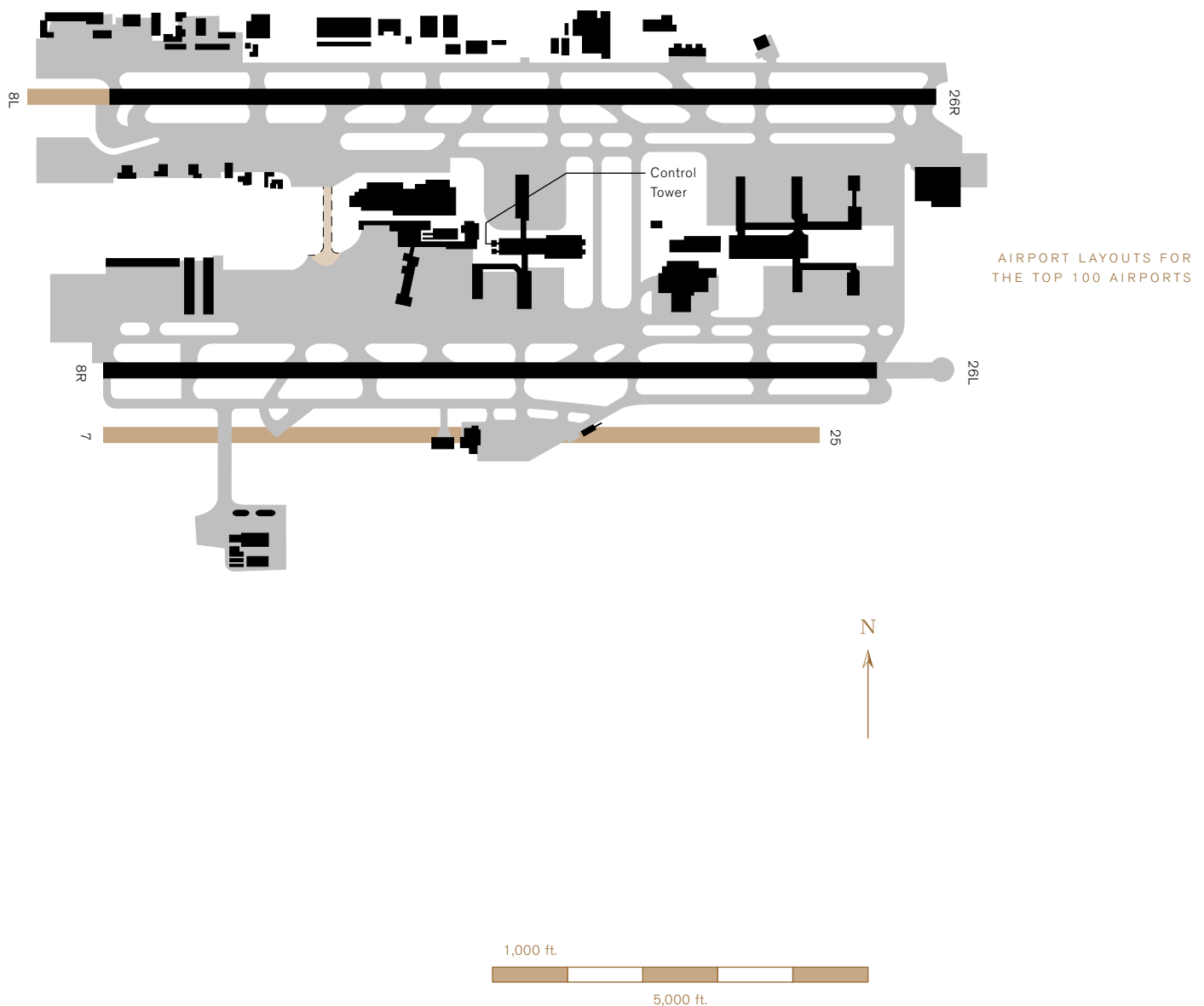
The new 5,000-ft. parallel commuter runway, Runway 8/26, opened in late-1999 at an estimated cost of \$220 million. It is located 3,000 ft. north of Runway 9R/27L.





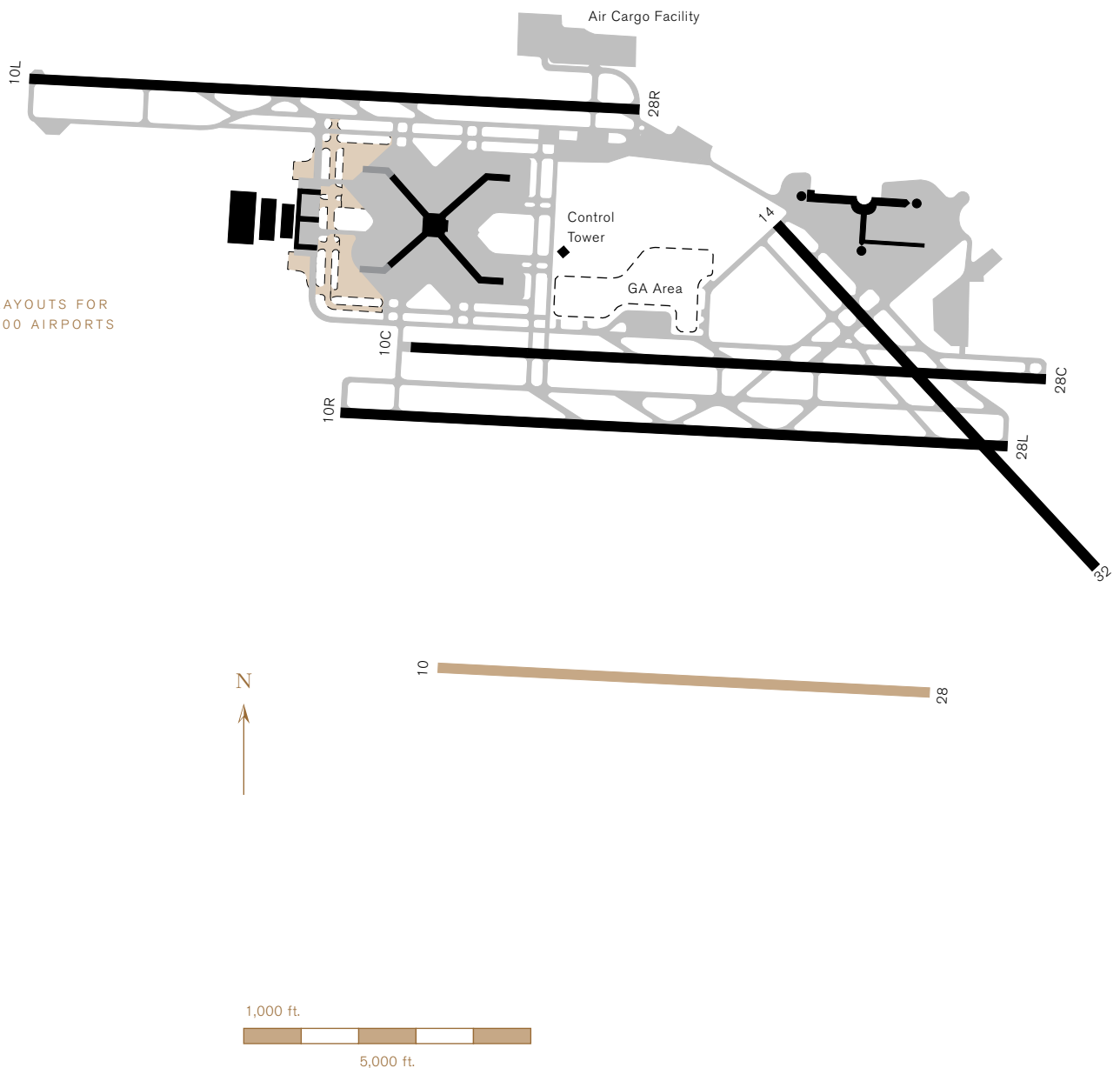
## PHX — PHOENIX SKY HARBOR INTERNATIONAL AIRPORT

A new third parallel runway, Runway 7/25, is currently under construction 800 ft. south of Runway 8R/26L. The planned operational date is late-2000. Runway 7/25 is being constructed to a length of 7,800 ft. The airport layout plan proposes an ultimate length of 9,500 ft., but further construction is not scheduled at this time. Construction of a 900 ft. west extension of Runway 8L/26R, at an estimated cost of \$7.0 million, is expected to begin in 2000 and be completed by early 2002.



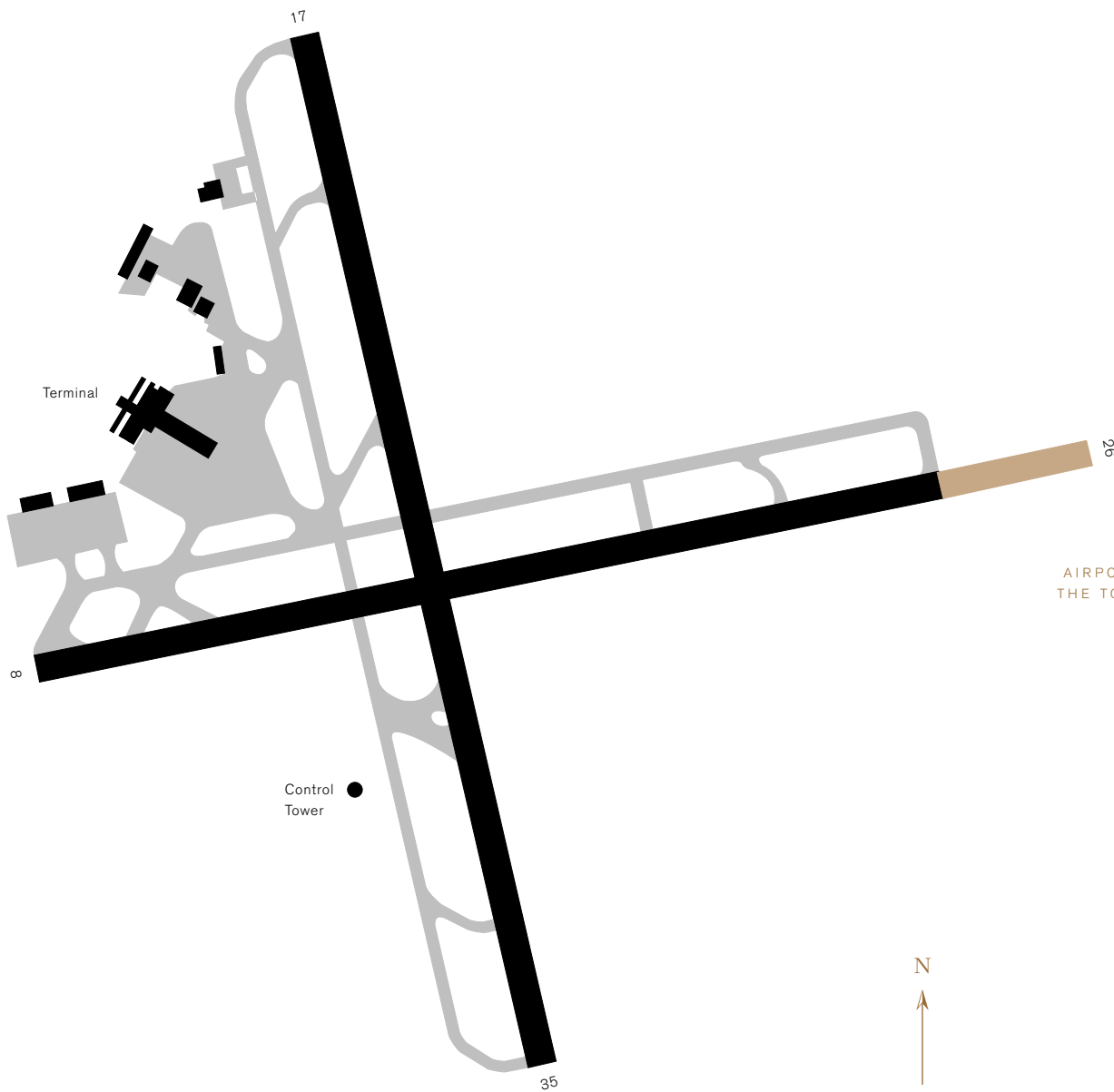
## PIT – GREATER PITTSBURGH INTERNATIONAL AIRPORT

A recently completed Master Plan has recommended that at least two new runways will be needed within a twenty year planning period to accommodate projected Baseline (normal growth) forecast demands and achieve acceptable aircraft delay times and associated delay costs. The southern parallel will be located approximately 4,300 ft. south of existing Runway 10R/28L and should be operational by the time the airport reaches 495,000 annual aircraft operations.



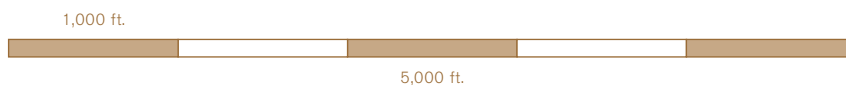
## PNS — PENSACOLA REGIONAL AIRPORT

A 1,000 ft. extension of Runway 8/26 to the east is being planned. The extension is expected to be completed in 2002 at an estimated cost of \$12.3 million. The extension will increase the runway's length to 7,000 ft., making it useable by larger and heavier aircraft.



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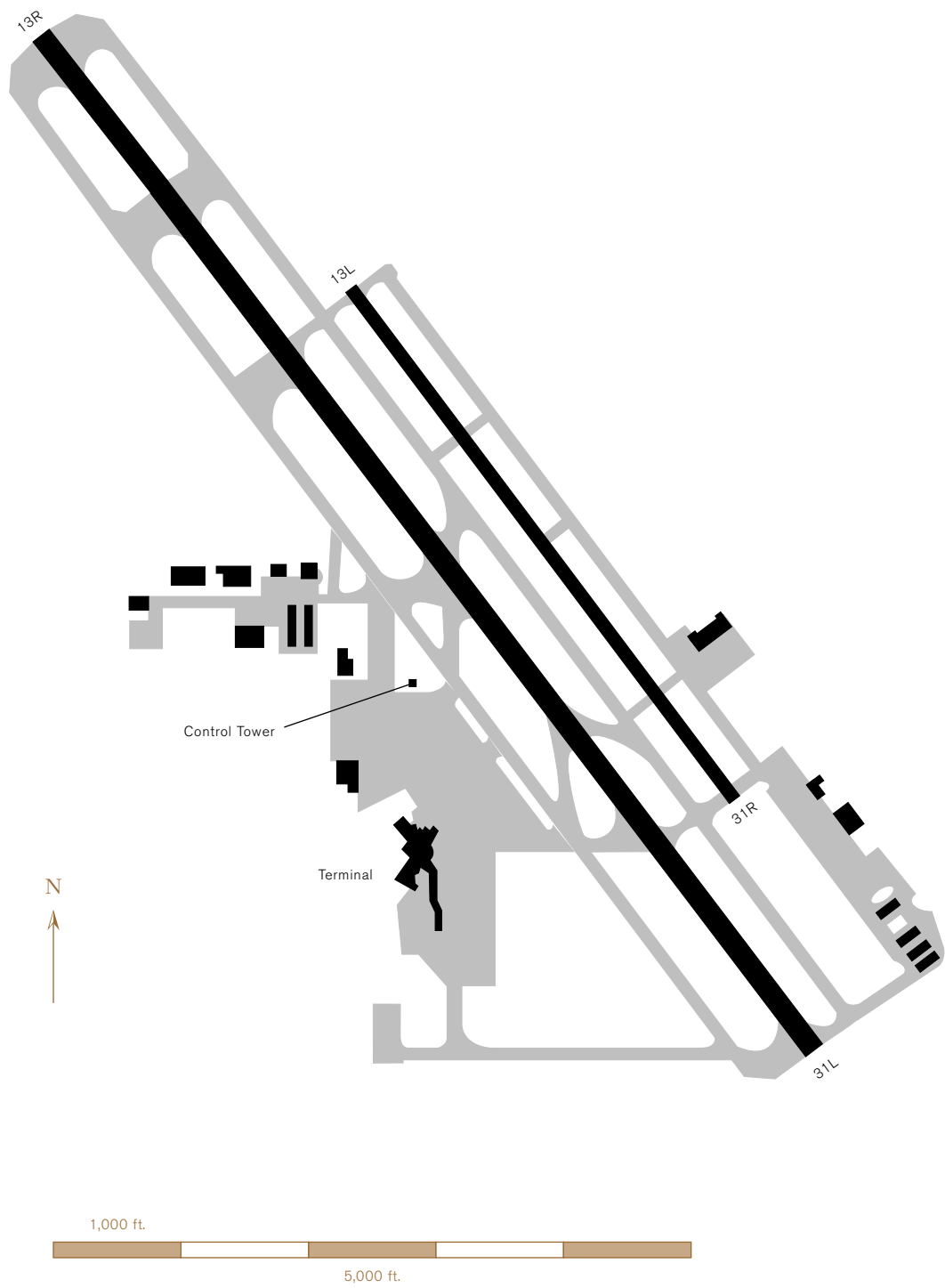
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**PSP – PALM SPRINGS REGIONAL AIRPORT**

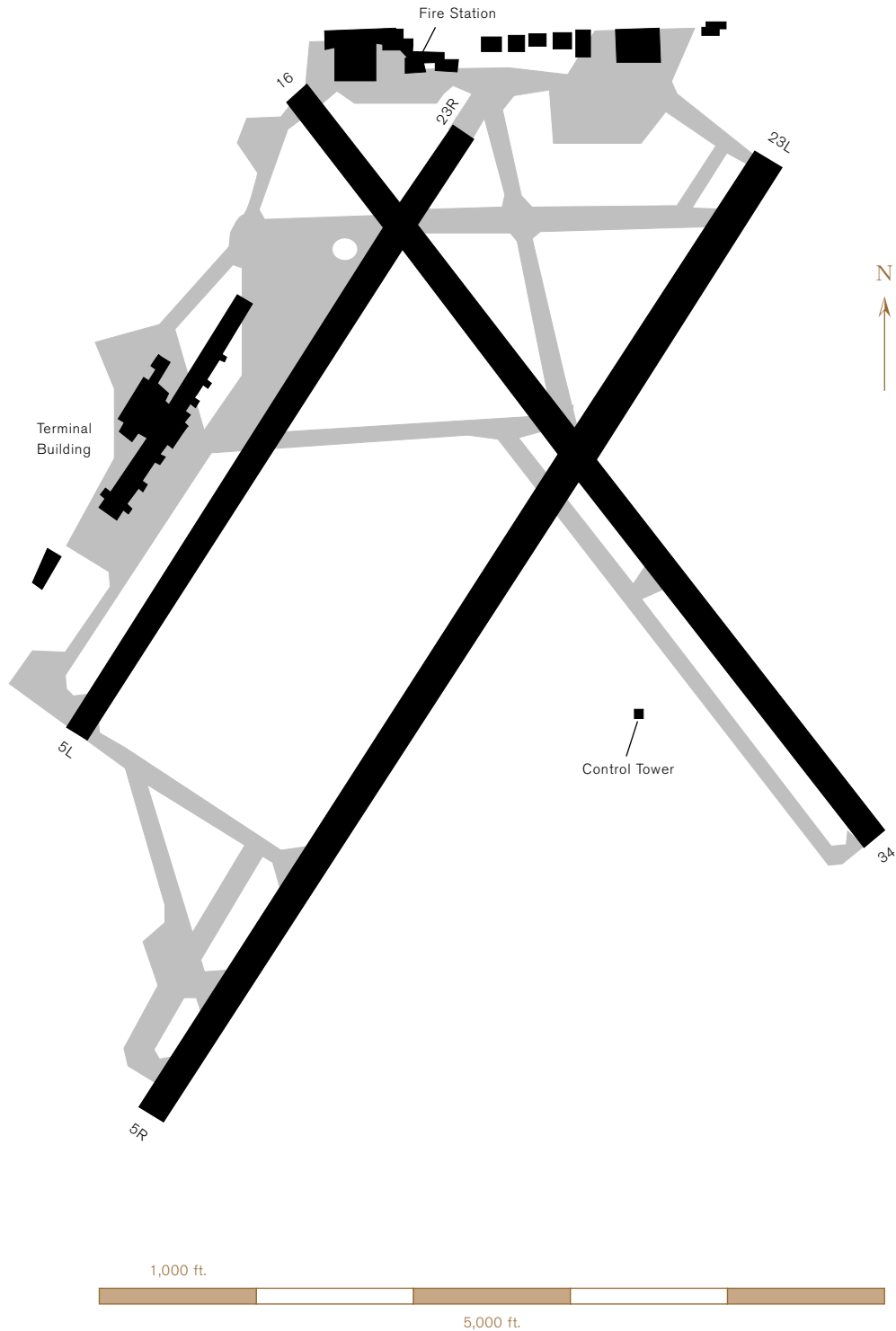
There are no new runway or runway extension projects planned, proposed, or currently under construction at this airport.

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## PVD — PROVIDENCE THEODORE FRANCIS GREEN STATE AIRPORT

There are no new runway or runway extension projects planned, proposed, or currently under construction at this airport.

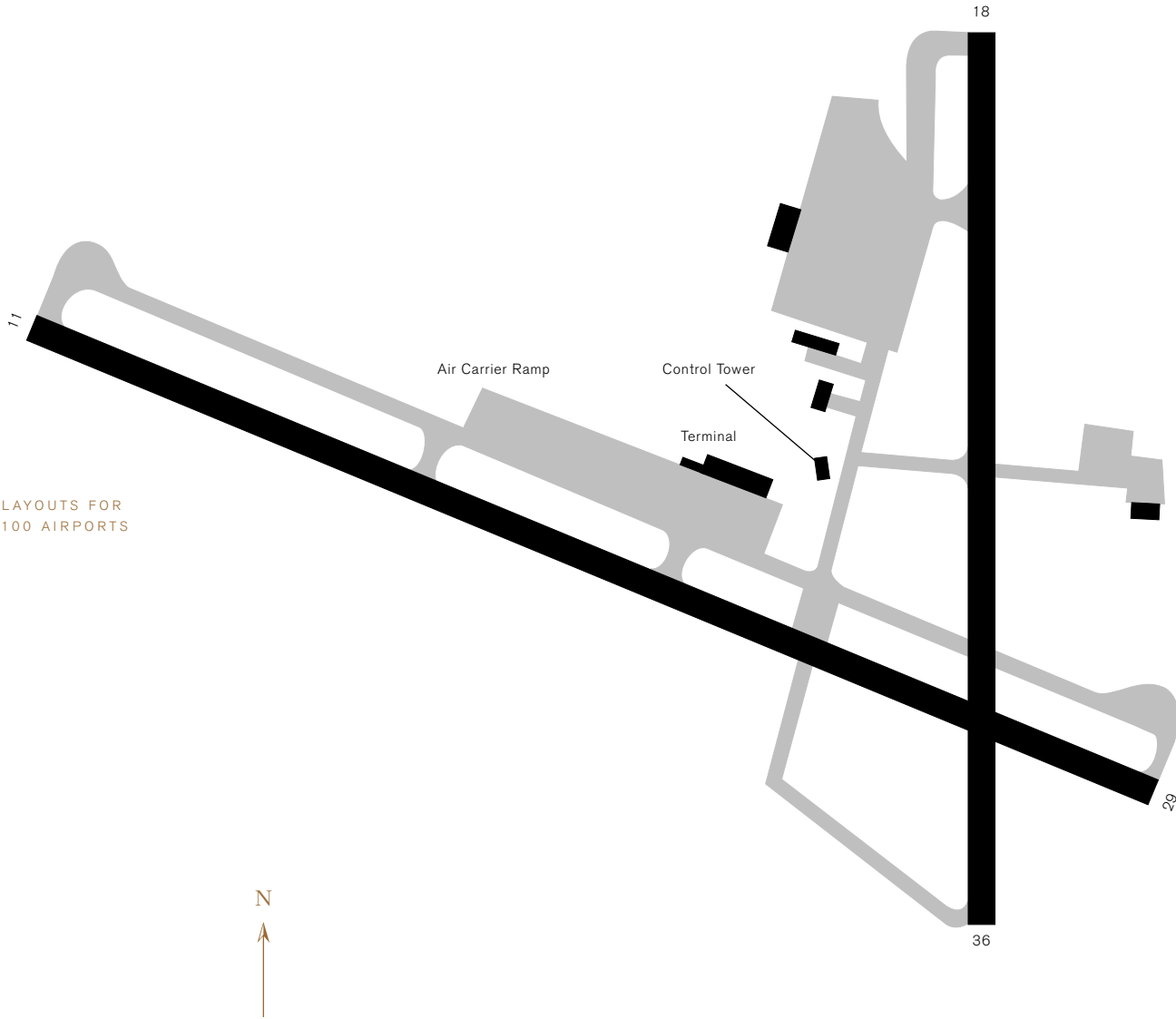


**PWM — PORTLAND INTERNATIONAL JETPORT**

There are no new runway or runway extension projects planned, proposed, or currently under construction at this airport.

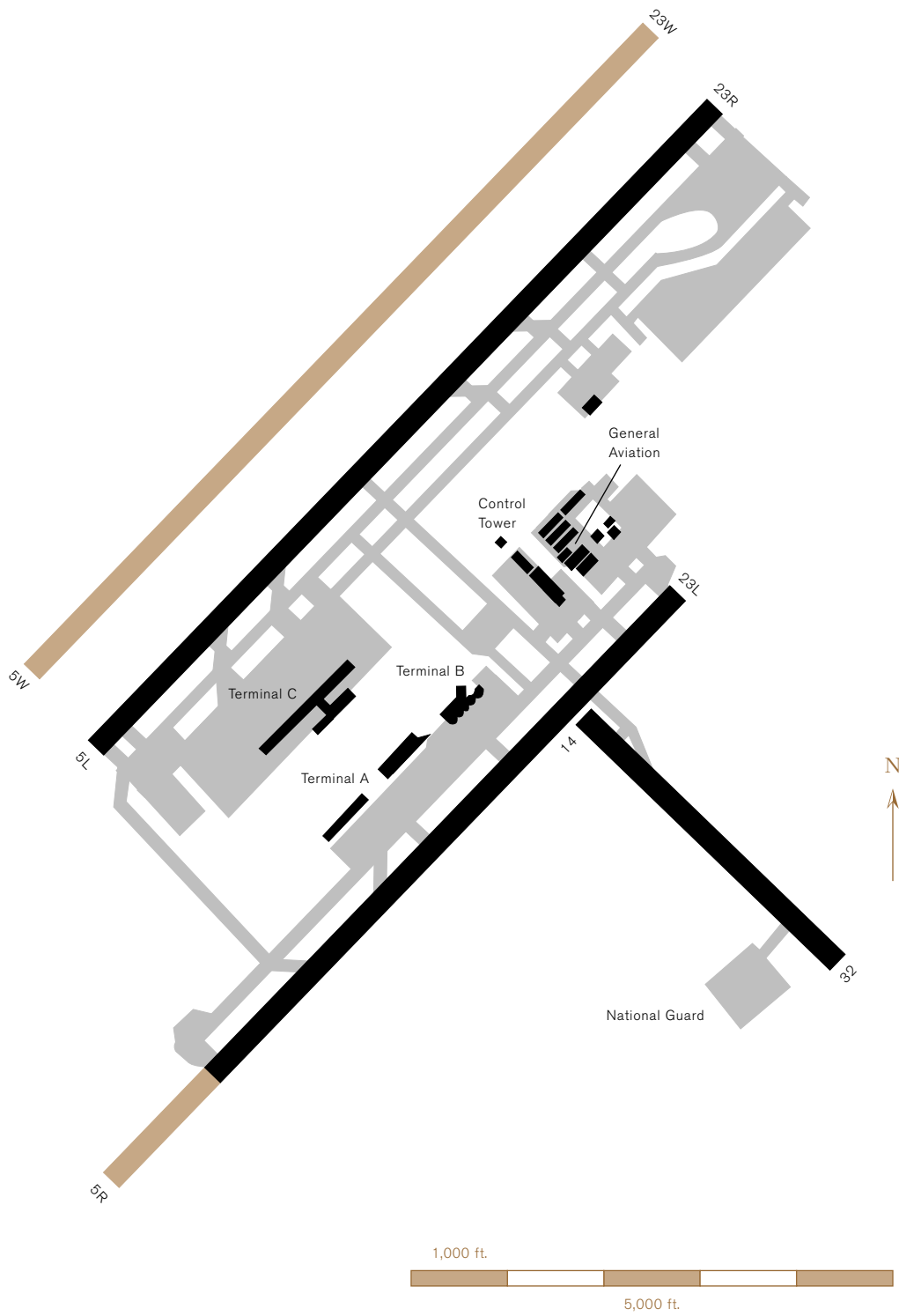
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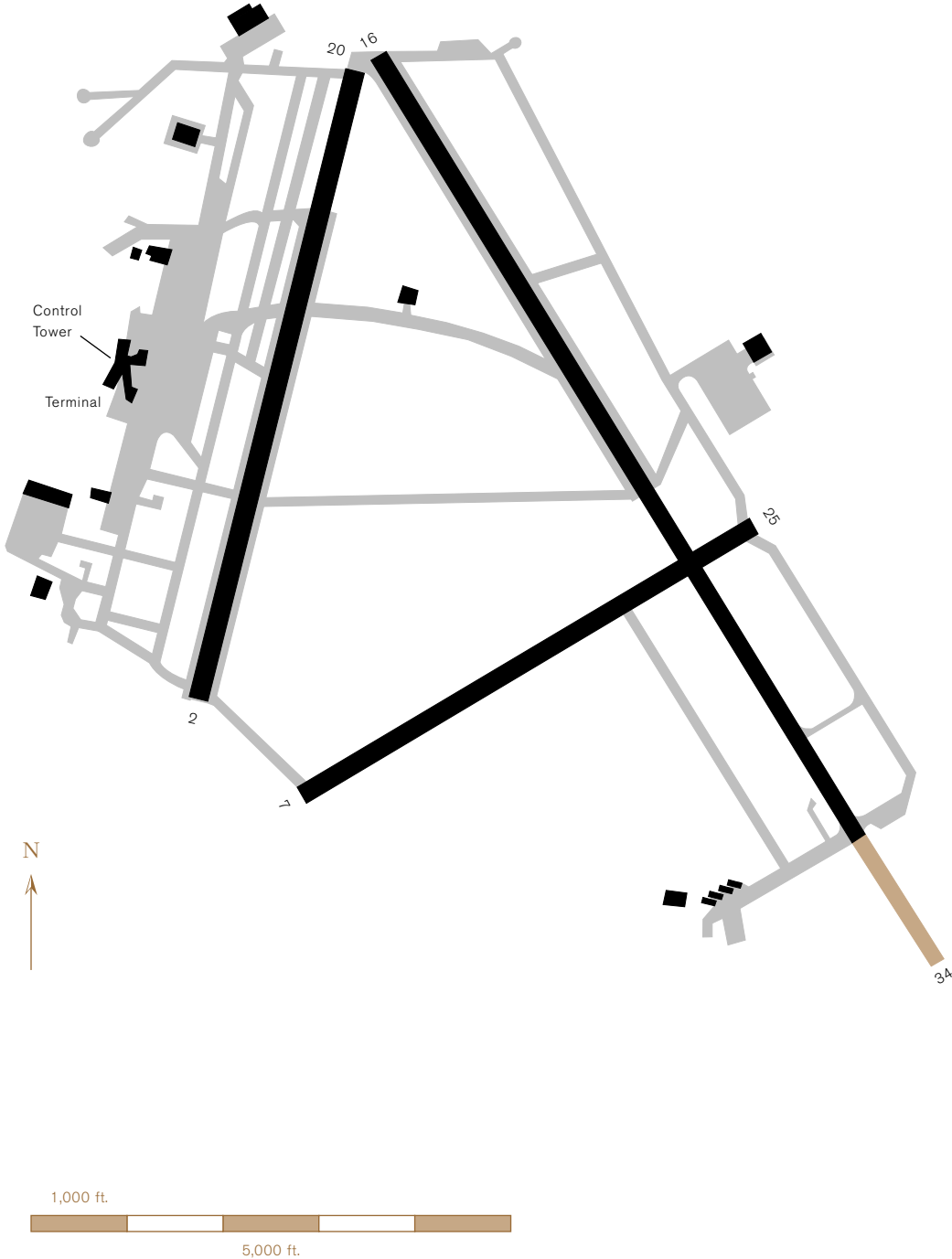
# RDU — RALEIGH-DURHAM INTERNATIONAL AIRPORT

A new 9,500-ft. parallel Runway 5w/23w, located approximately 1,050 ft. west of existing Runway 5L/23R, is planned for the future (beyond 2005). Also a 1,500-ft. runway extension to the south end of existing Runway 5R/23L is planned following the construction of the new runway. This would bring the total useable length for landings and takeoffs to 9,000 ft.



**RIC — RICHMOND INTERNATIONAL AIRPORT**

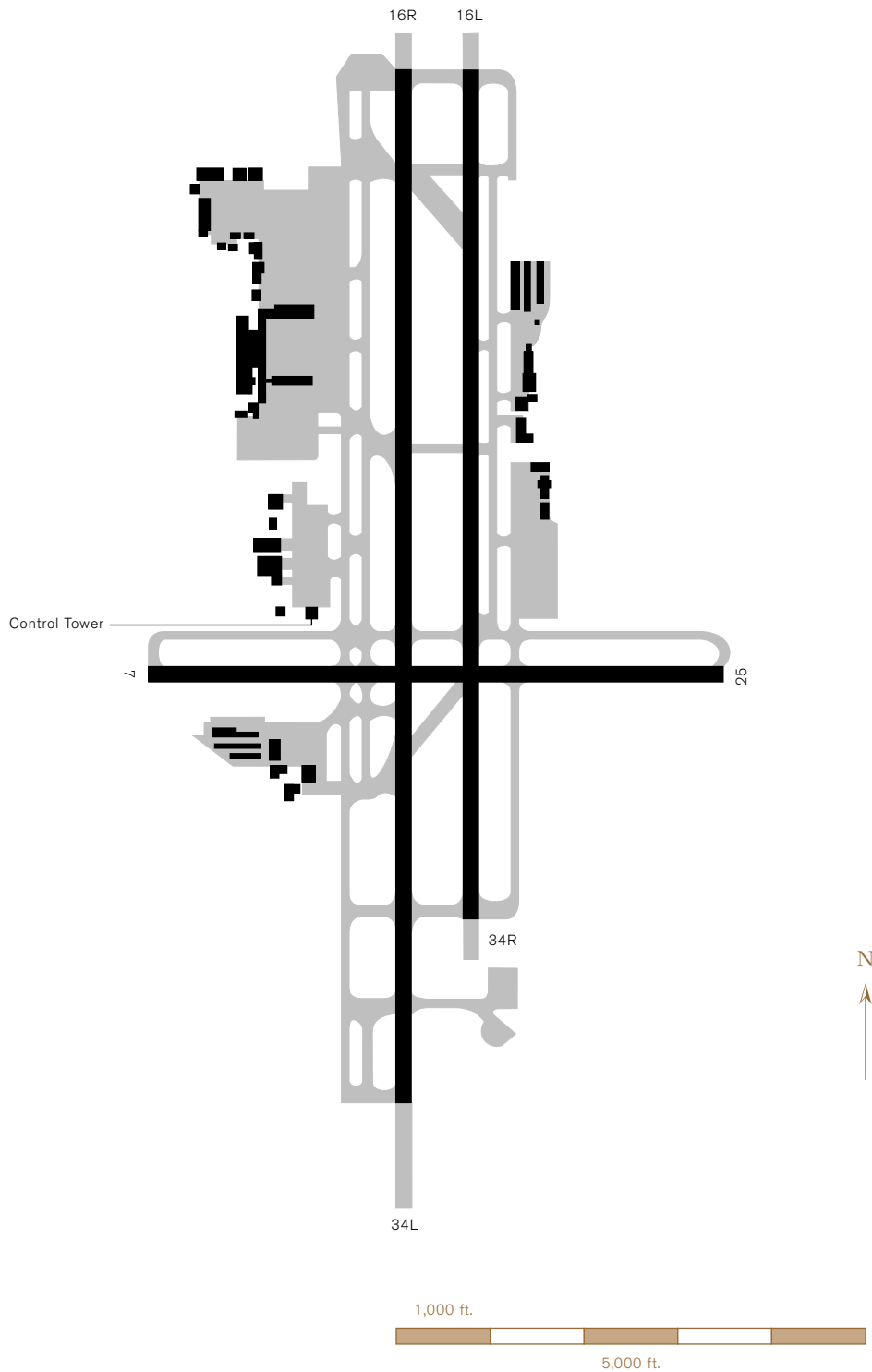
An extension of Runway 16/34 is planned. Construction is expected to start in 2000, and be completed in 2001 at an estimated cost of \$45.0 million.





## RNO — RENO TAHOE INTERNATIONAL AIRPORT

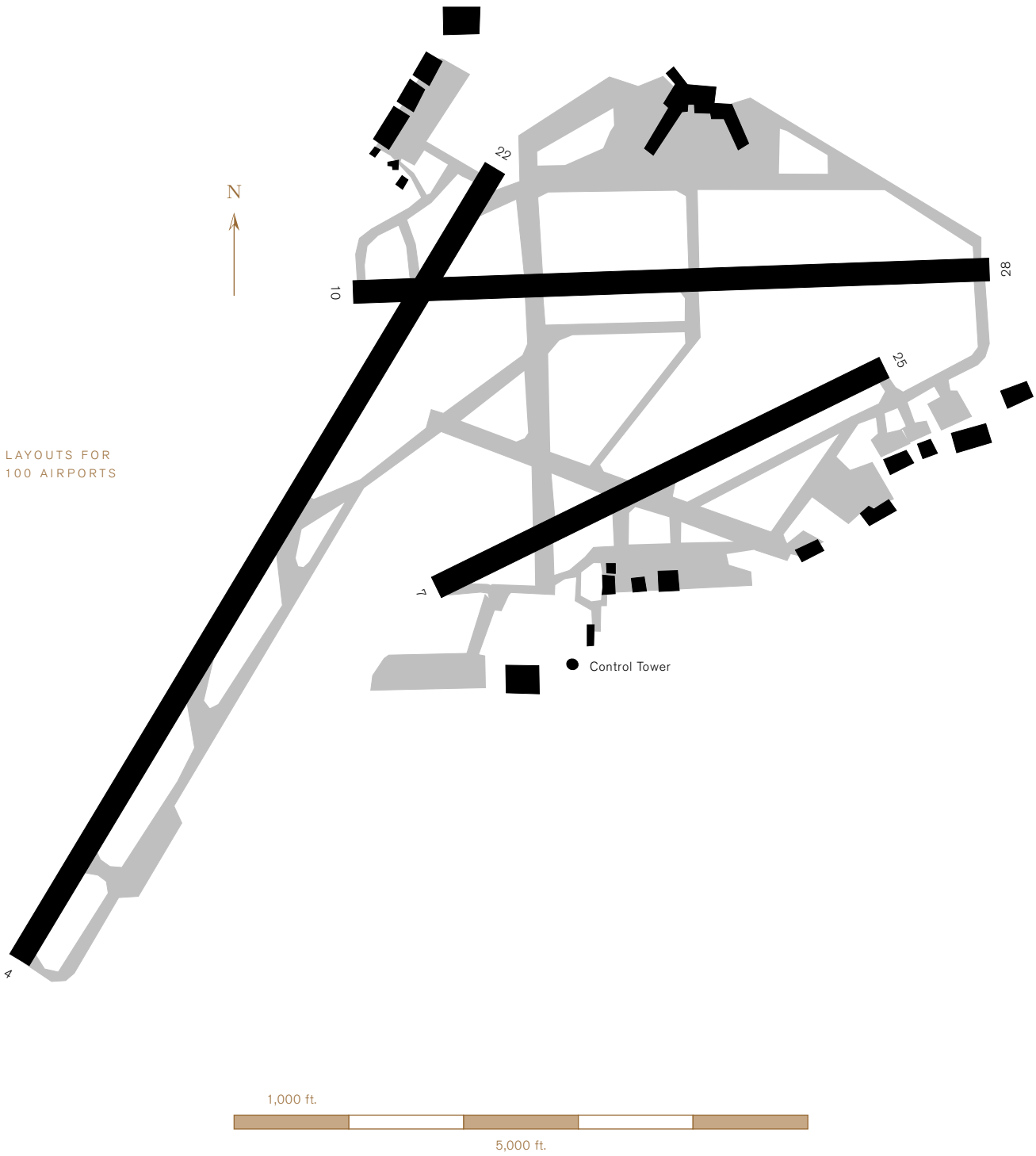
There are no new runway or runway extension projects planned, proposed, or currently under construction at this airport.



**ROC — GREATER ROCHESTER INTERNATIONAL AIRPORT**

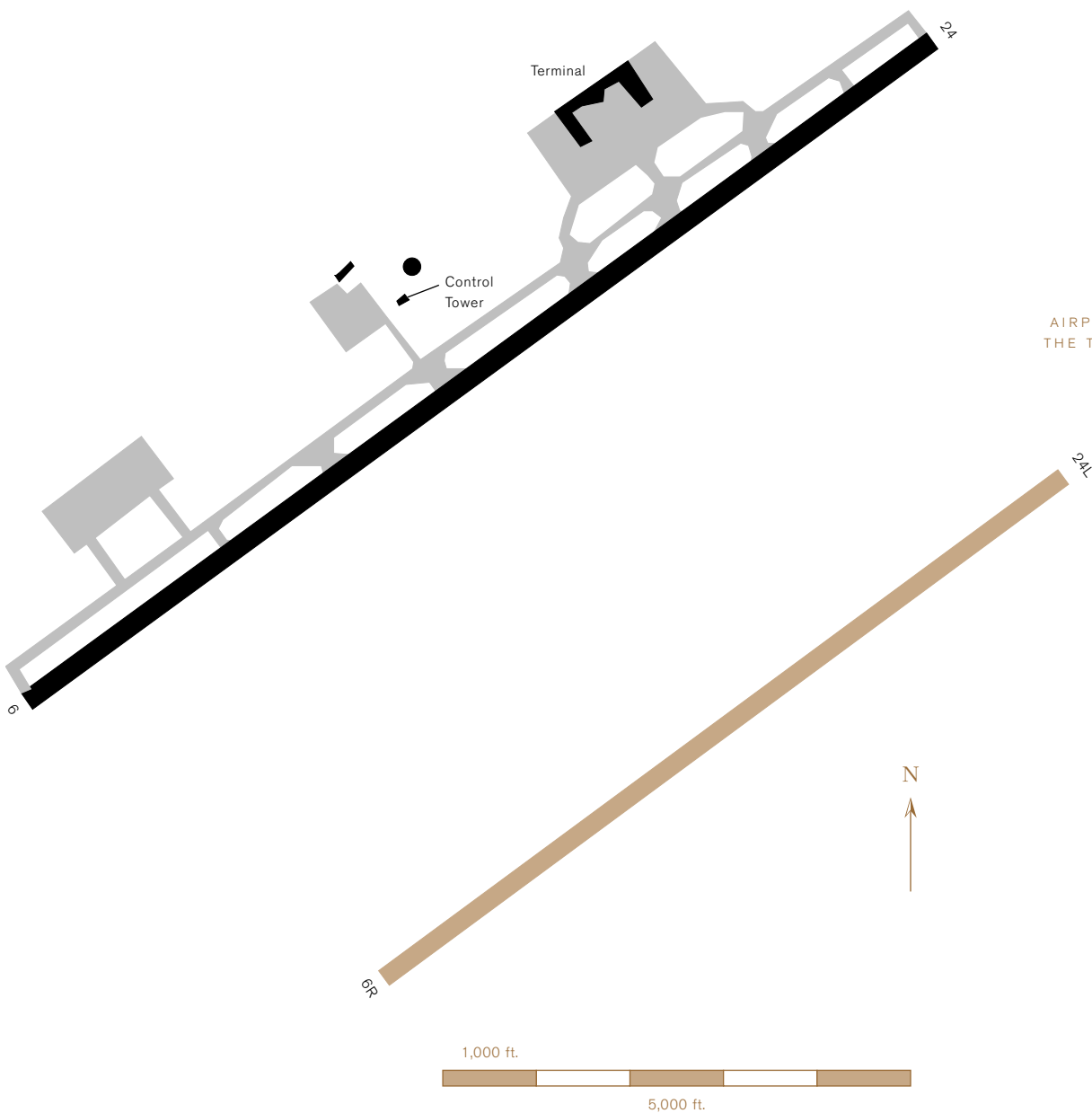
There are no new runway or runway extension projects planned, proposed, or currently under construction at this airport.

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## RSW — FORT MYERS SOUTHWEST FLORIDA REGIONAL AIRPORT

Planning has begun for a new 9,100 ft. parallel Runway 6R/24L, 4,300 ft. or more south-east of Runway 6/24. Construction is expected to begin in 2008. The new runway should be operational by 2010. The estimated cost of the project is \$80 million. This new runway will support independent parallel operations. A new terminal complex is planned to be located between the parallel runways. It is expected to be operational by 2005.



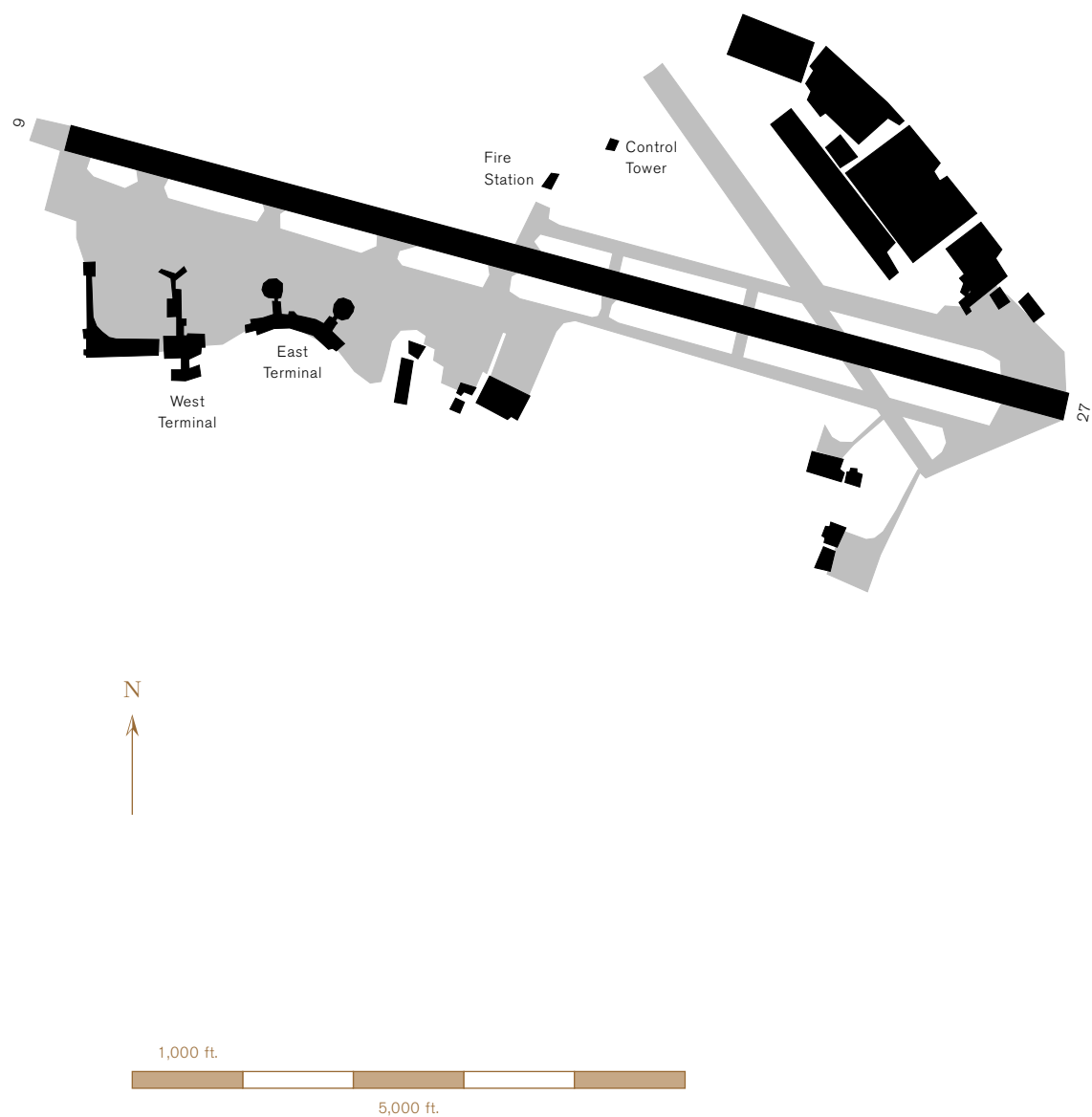
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**SAN — SAN DIEGO INTERNATIONAL LINDBERGH FIELD**

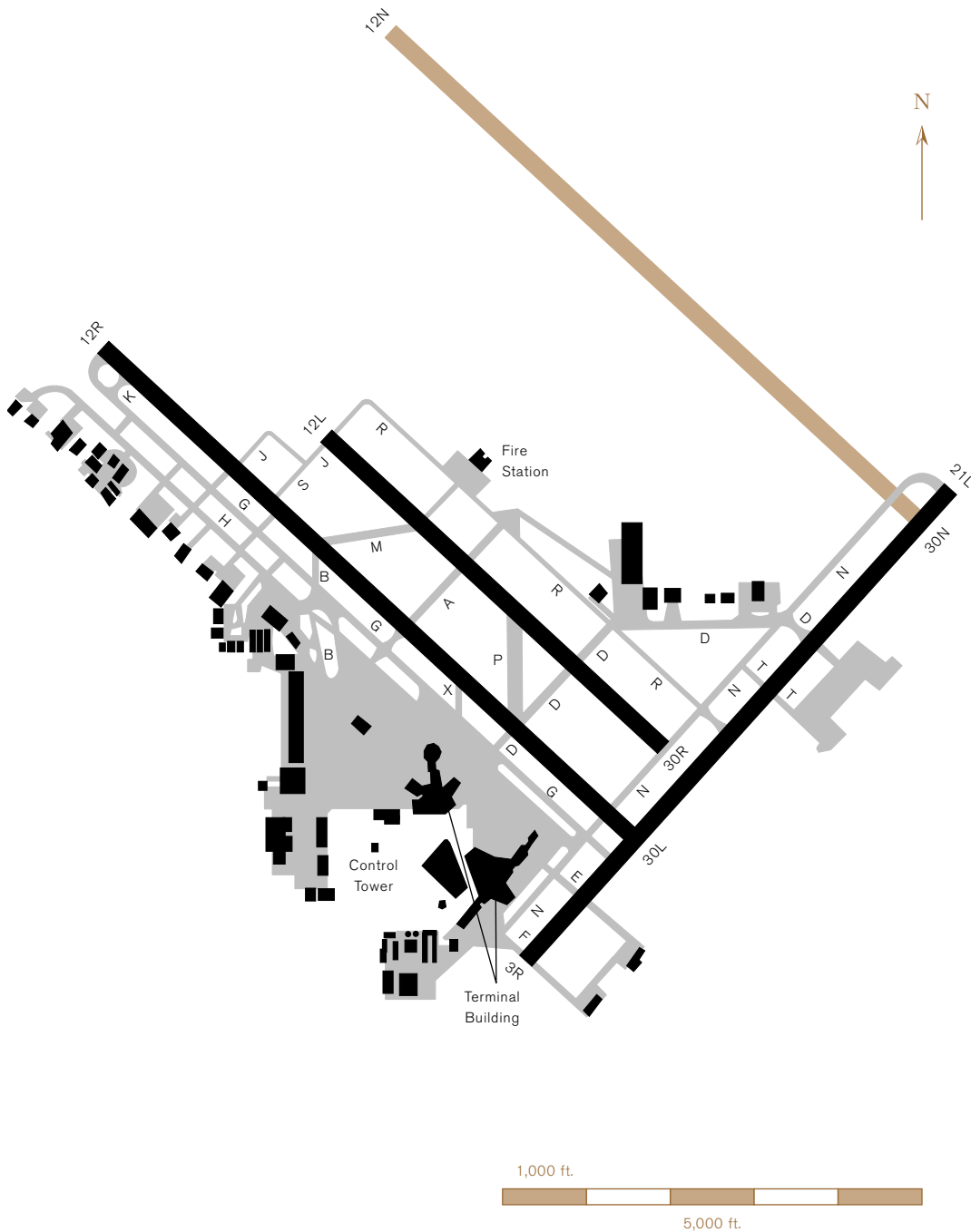
There are no new runway or runway extension projects planned, proposed, or currently under construction at this airport.

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## SAT — SAN ANTONIO INTERNATIONAL AIRPORT

Reconstruction and extension of Runway 12L/30R for air carrier operations is being planned for beyond 2000, as demand warrants. A third parallel runway, Runway 12N/30N, is in the long term planning as well, with a time frame of 15-20 years.

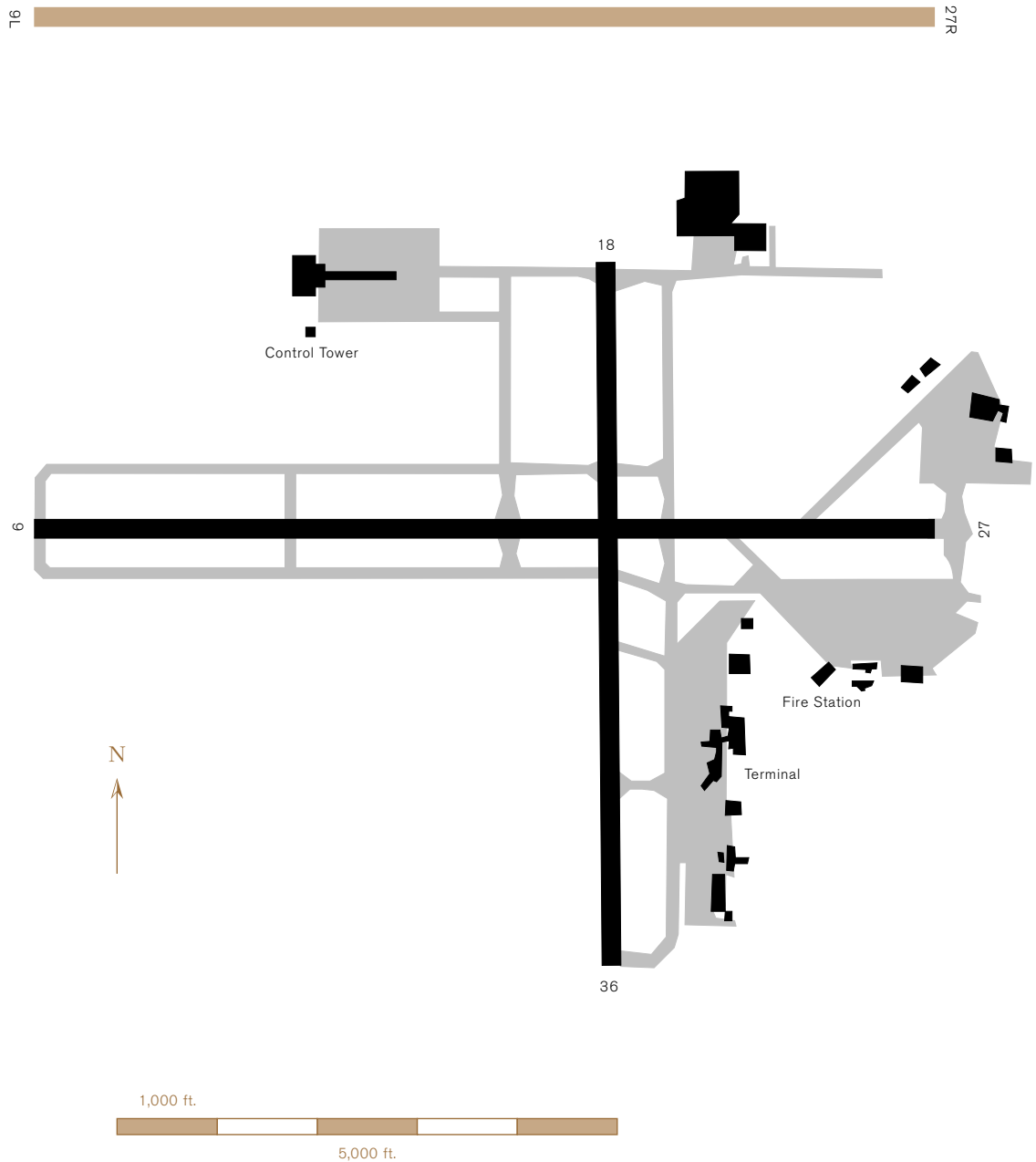


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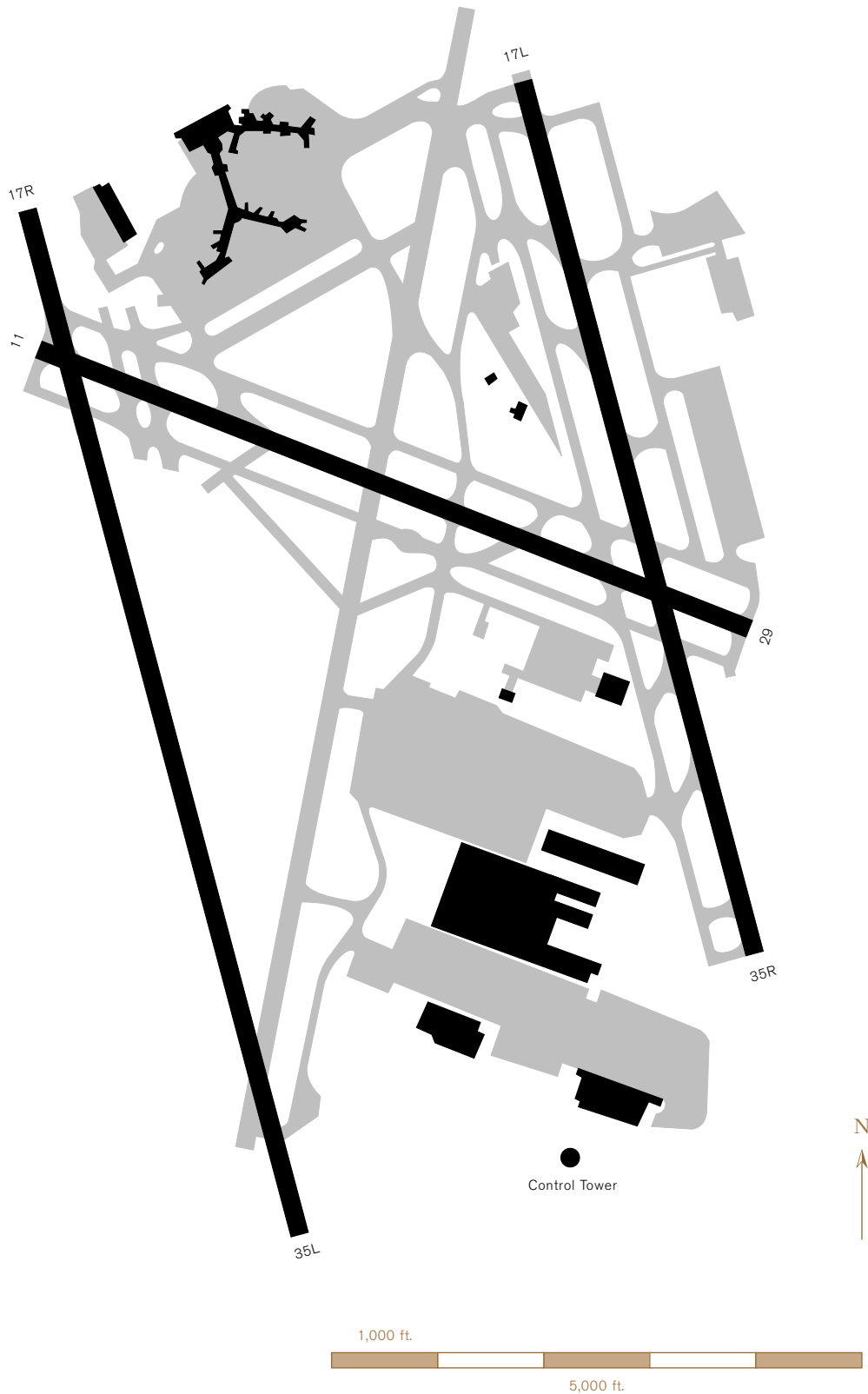
## SAV — SAVANNAH INTERNATIONAL AIRPORT

A new 9,000 ft. parallel Runway 9L/27R, approximately 5,000 ft. north of Runway 9/27, is expected to be constructed by 2020, with an estimated cost of \$20 million. This runway would allow independent parallel operations, thereby potentially doubling hourly capacity.



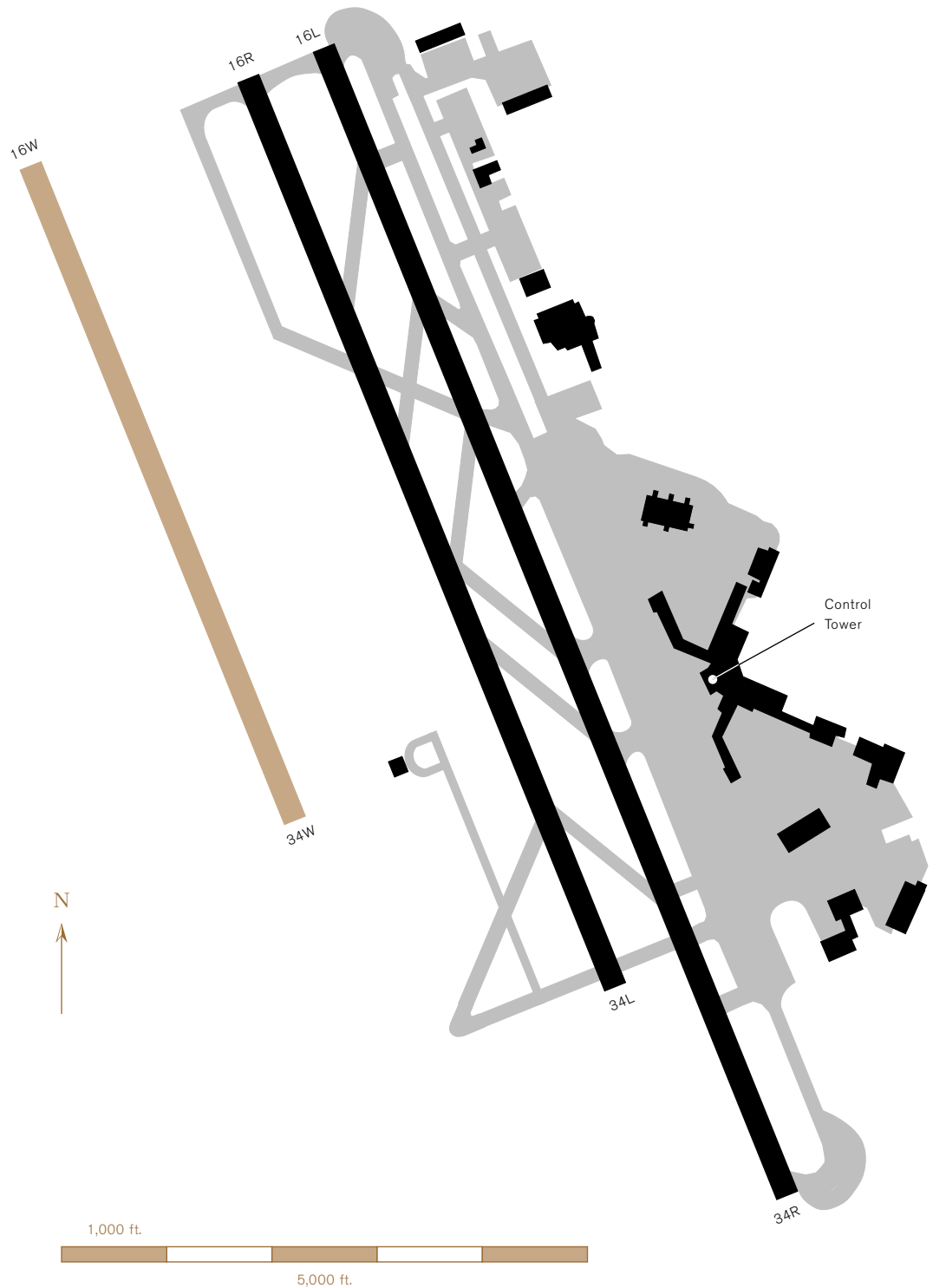
## SDF — LOUISVILLE INTERNATIONAL AIRPORT

There are no new runway or runway extension projects planned, proposed, or currently under construction at this airport.



### SEA — SEATTLE-TACOMA INTERNATIONAL AIRPORT

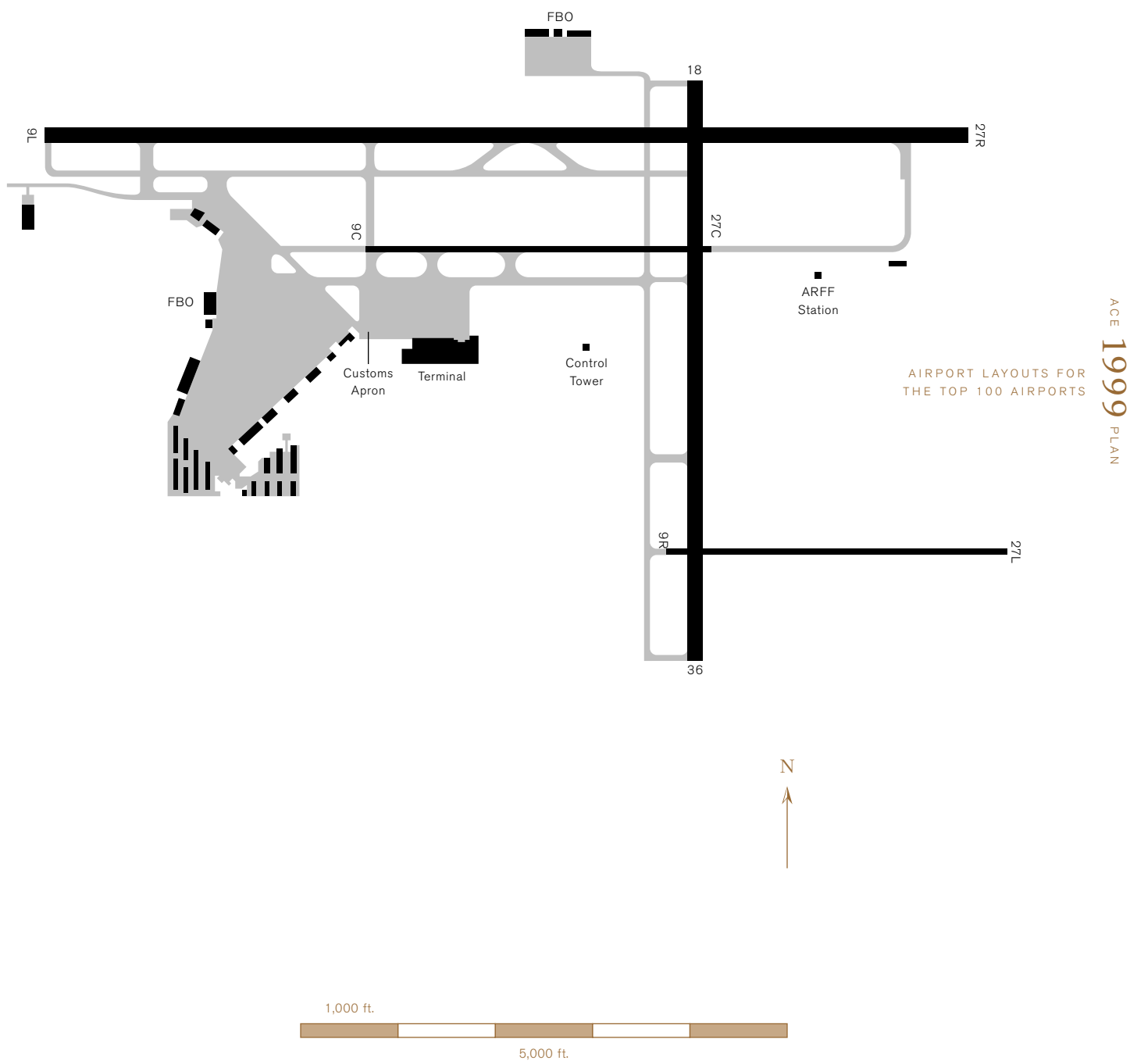
Airport improvements include a new Runway 16W/34W, 8,500 ft. in length, which will be located 2,500 ft. from Runway 16L/34R. Construction began in 1997. The runway will be completed by 2006 for \$750 million.





**SFB — ORLANDO-SANFORD AIRPORT**

There are no new runway or runway extension projects planned, proposed, or currently under construction at this airport.

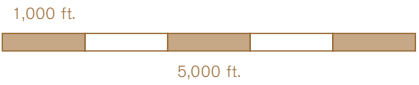
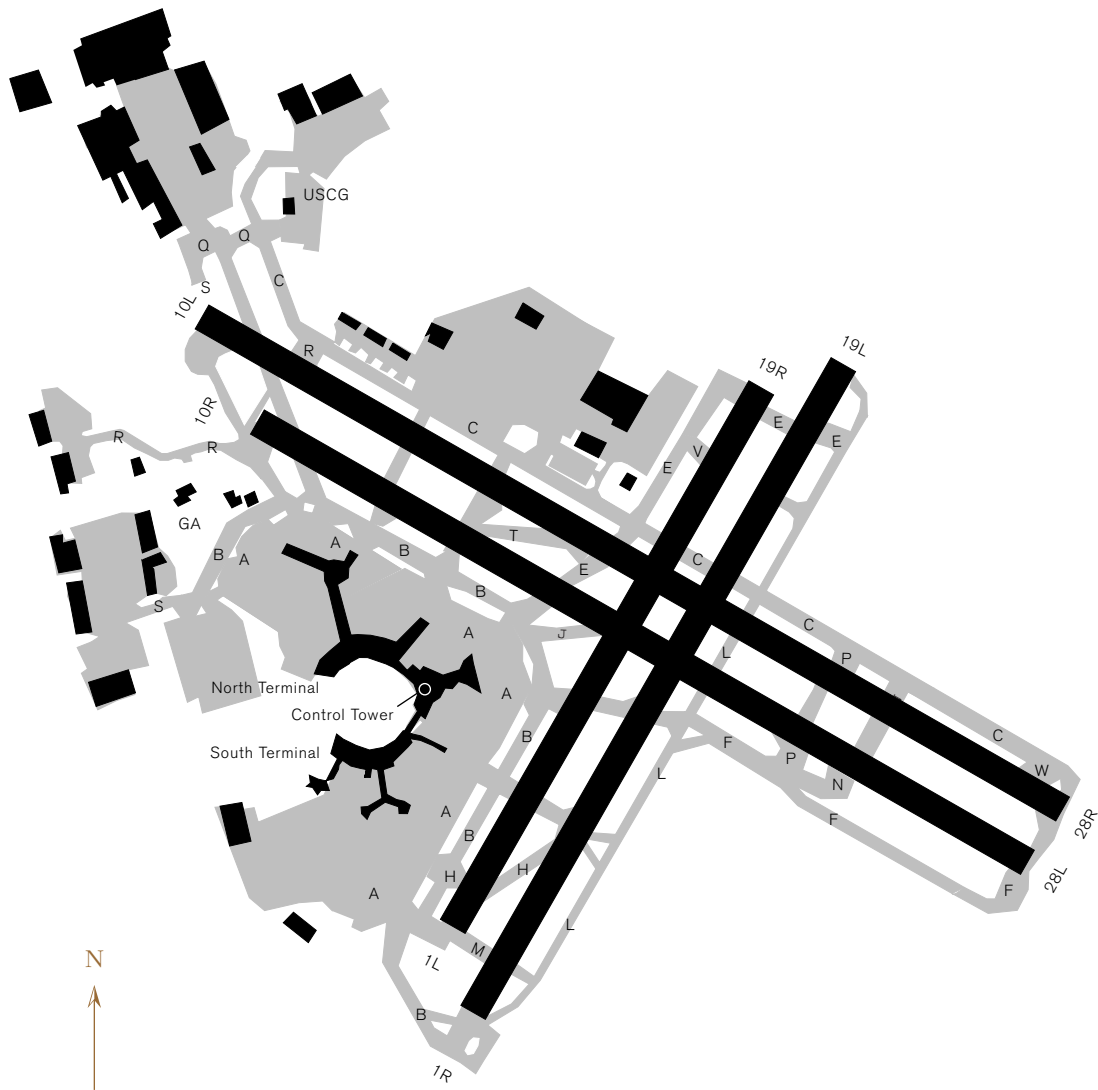


**SFO – SAN FRANCISCO INTERNATIONAL AIRPORT**

There are no new runway or runway extension projects planned, proposed, or currently under construction at this airport.

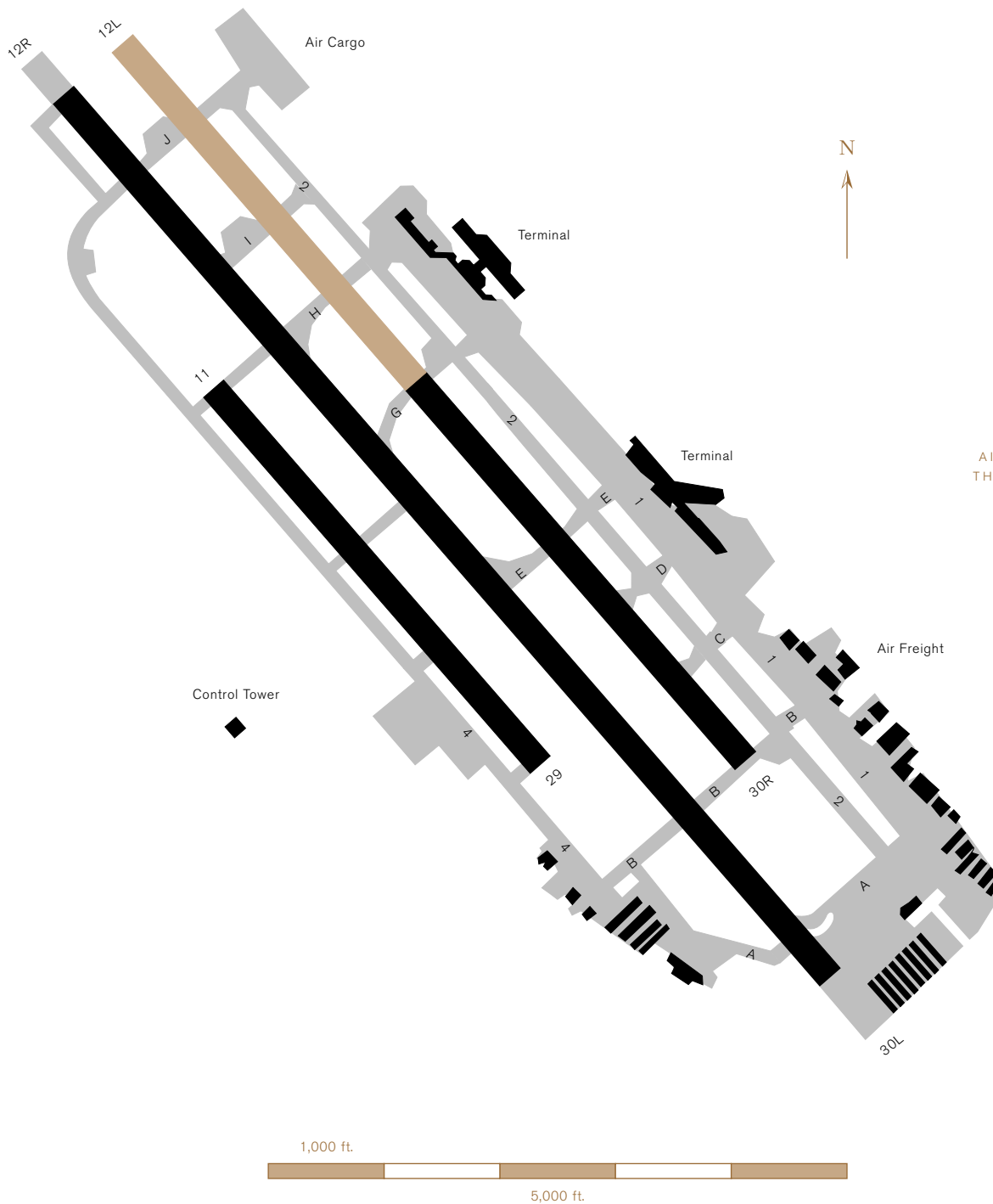
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## SJC – SAN JOSE INTERNATIONAL AIRPORT

Environmental documentation is currently being prepared in support of the extension of Runway 12L/30R. If this option is determined to be environmentally acceptable and is adopted by the sponsor, construction began in 1999.



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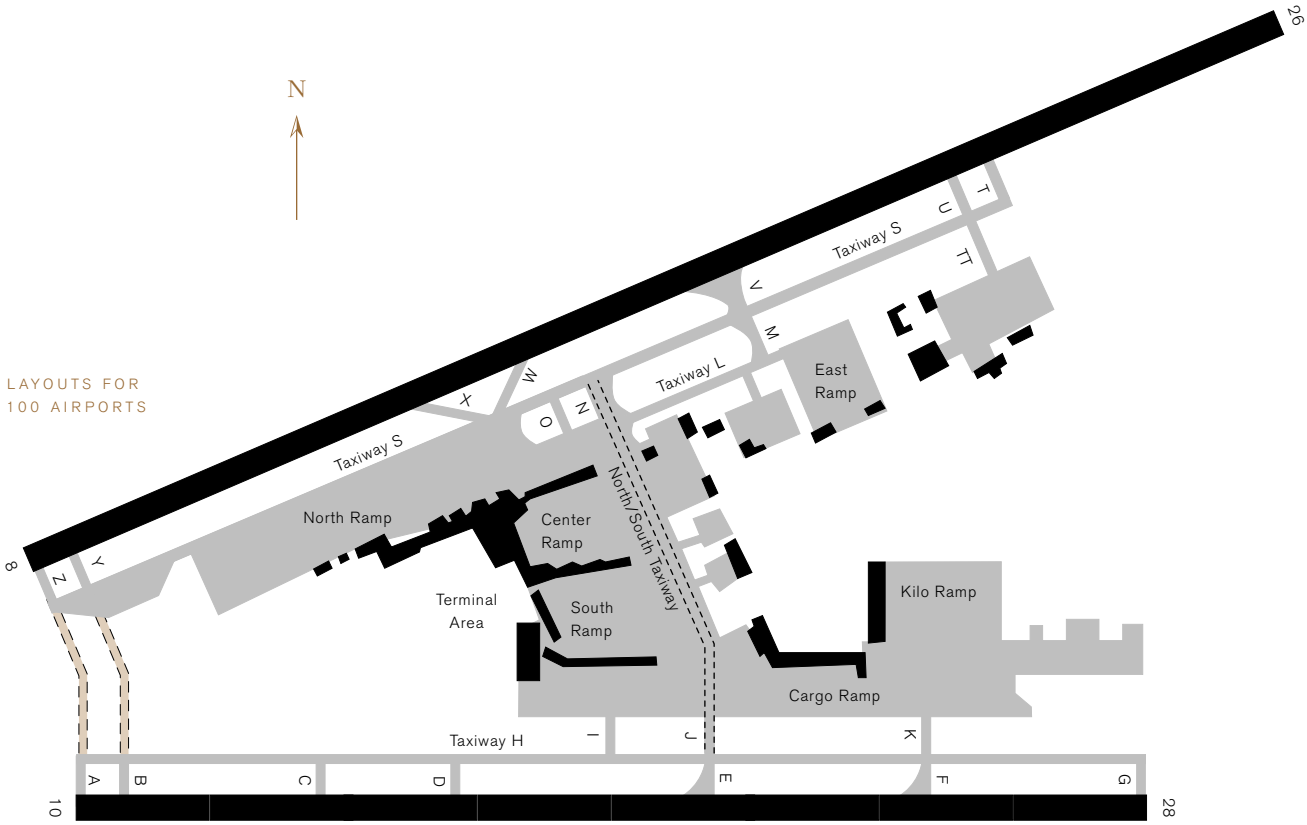
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**SJU – SAN JUAN LUIS MUÑOZ MARÍN INTERNATIONAL AIRPORT**

There are no new runway or runway extension projects planned, proposed, or currently under construction at this airport.

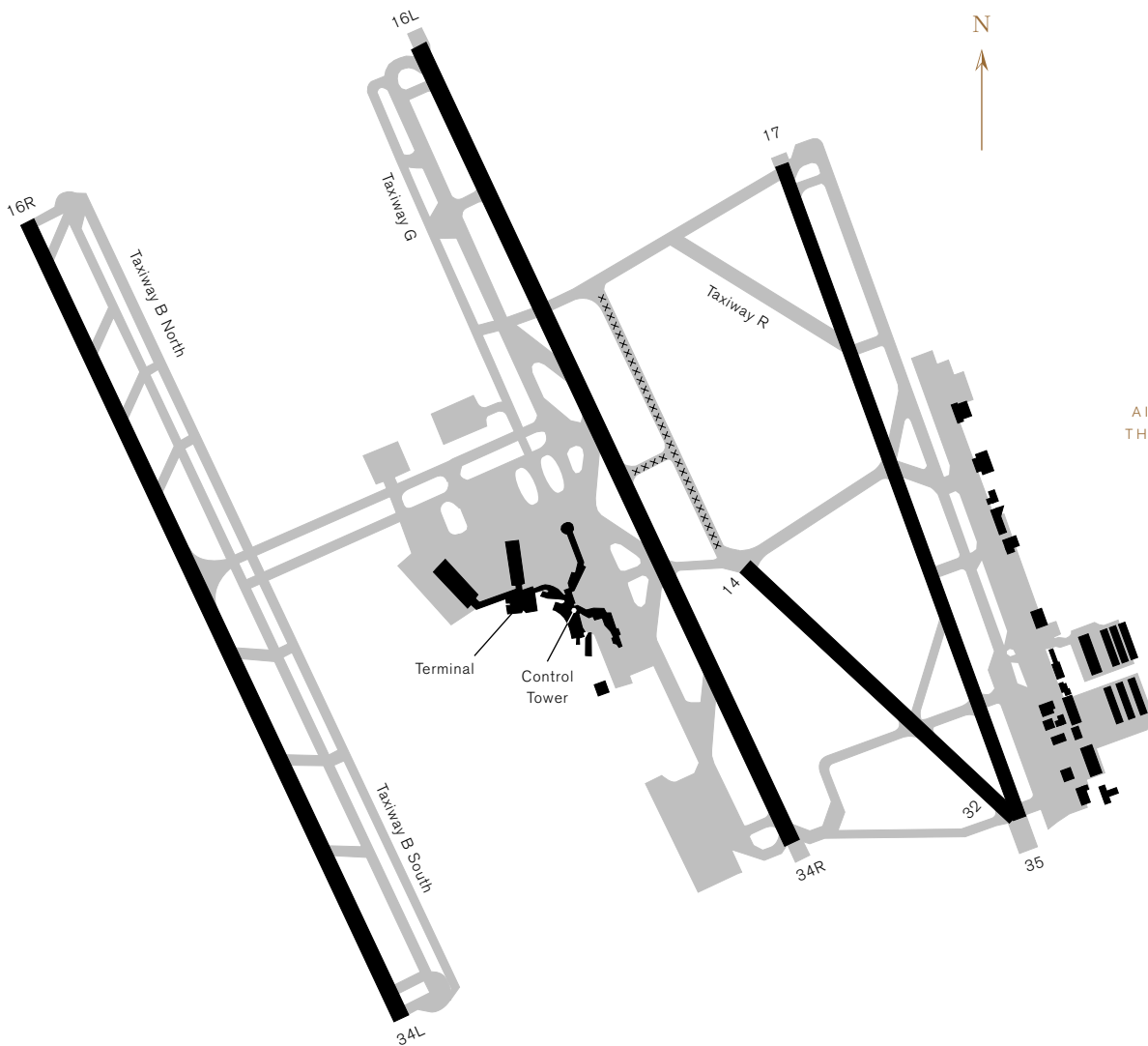
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## SLC — SALT LAKE CITY INTERNATIONAL AIRPORT

Taxiway R opened in 1997. Taxiways G (north) and B (north and south) opened in 1998.



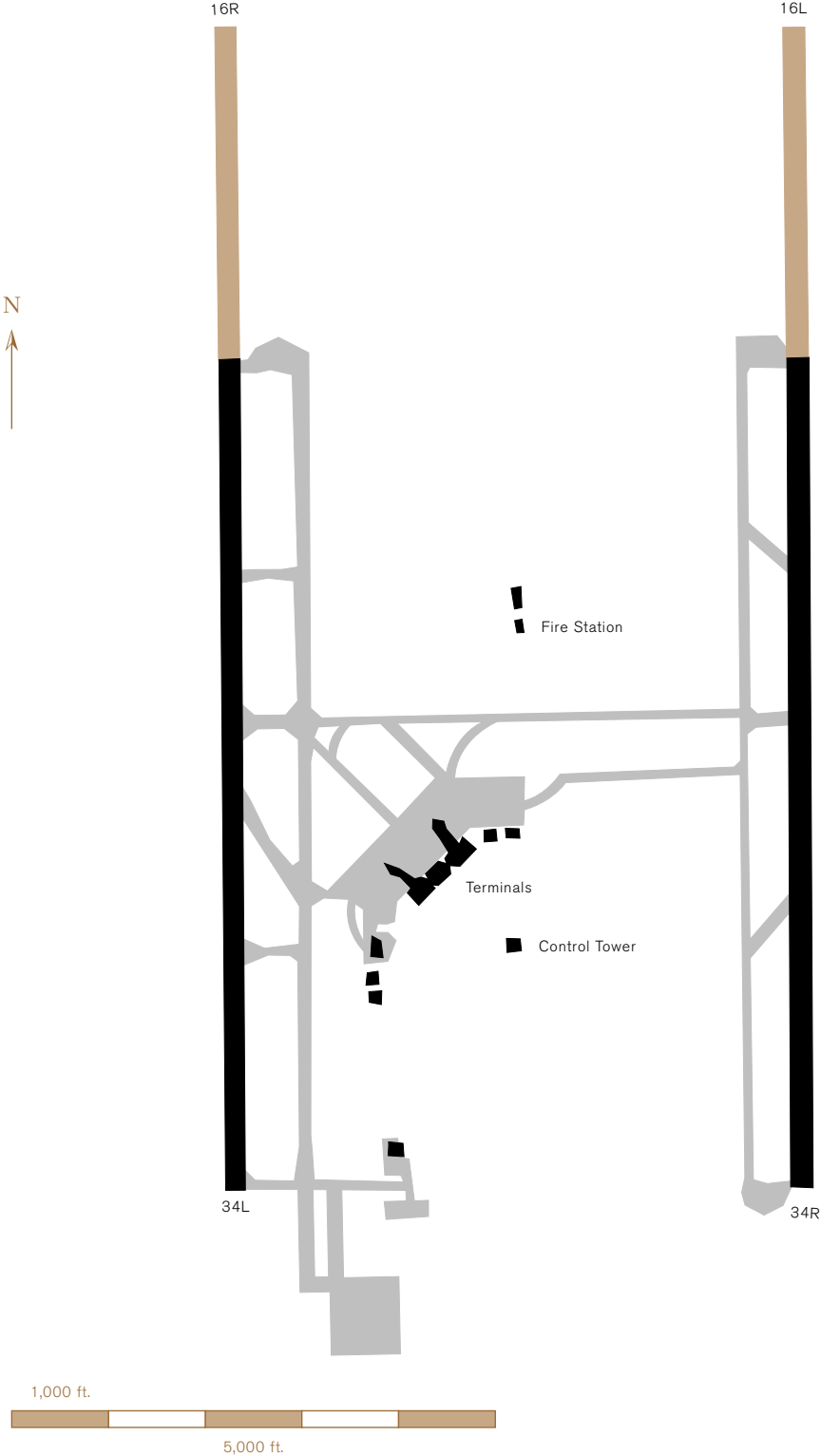
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**SMF – SACRAMENTO INTERNATIONAL AIRPORT**

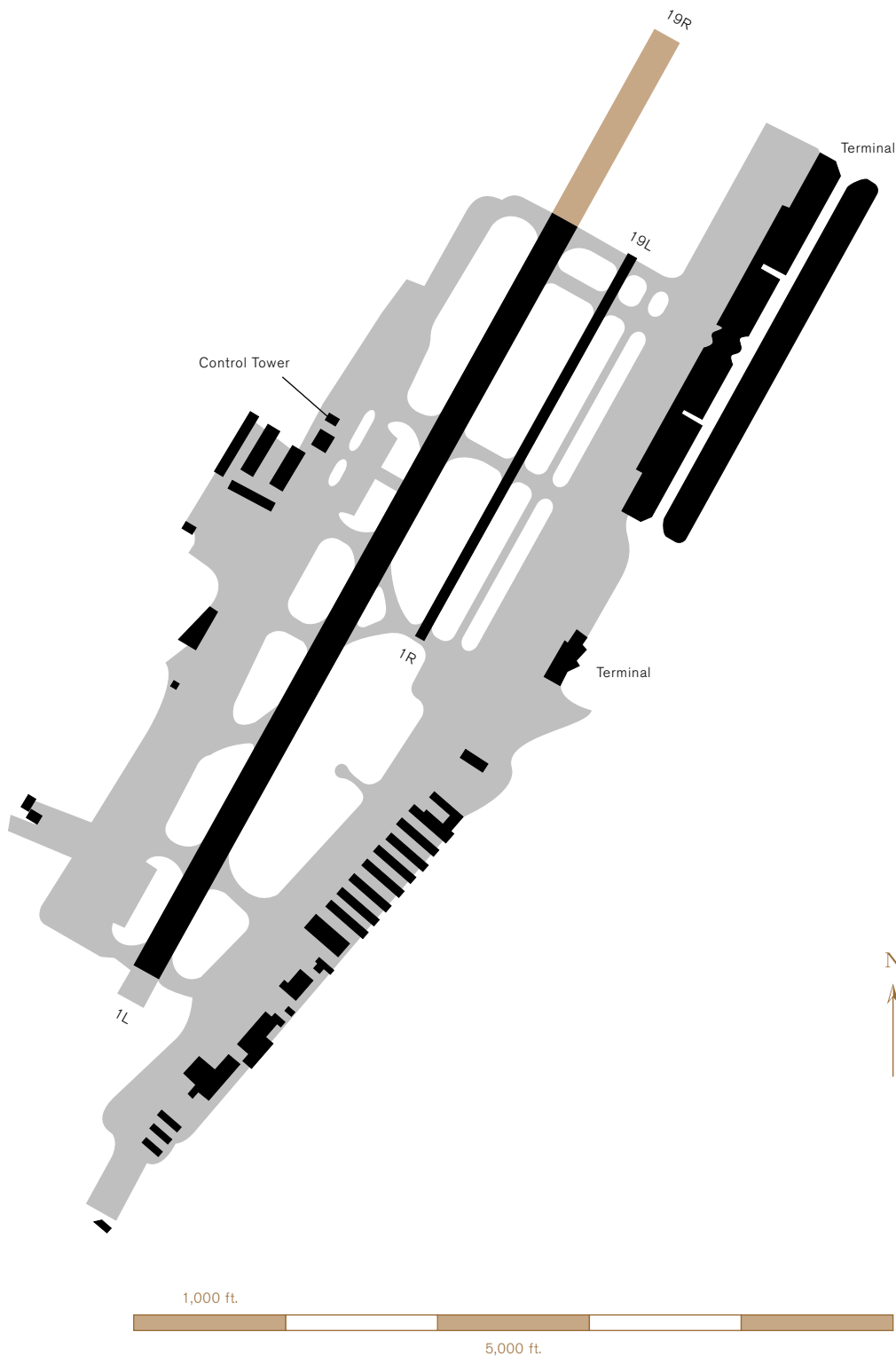
Northerly extensions to both runways, to an ultimate length of 12,000 ft. each, are proposed as long term development items. No specific time frame for this development has been identified.

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**SNA — JOHN WAYNE AIRPORT-ORANGE COUNTY**

An extension of Runway 1L/19R is proposed but is not being considered at this time.

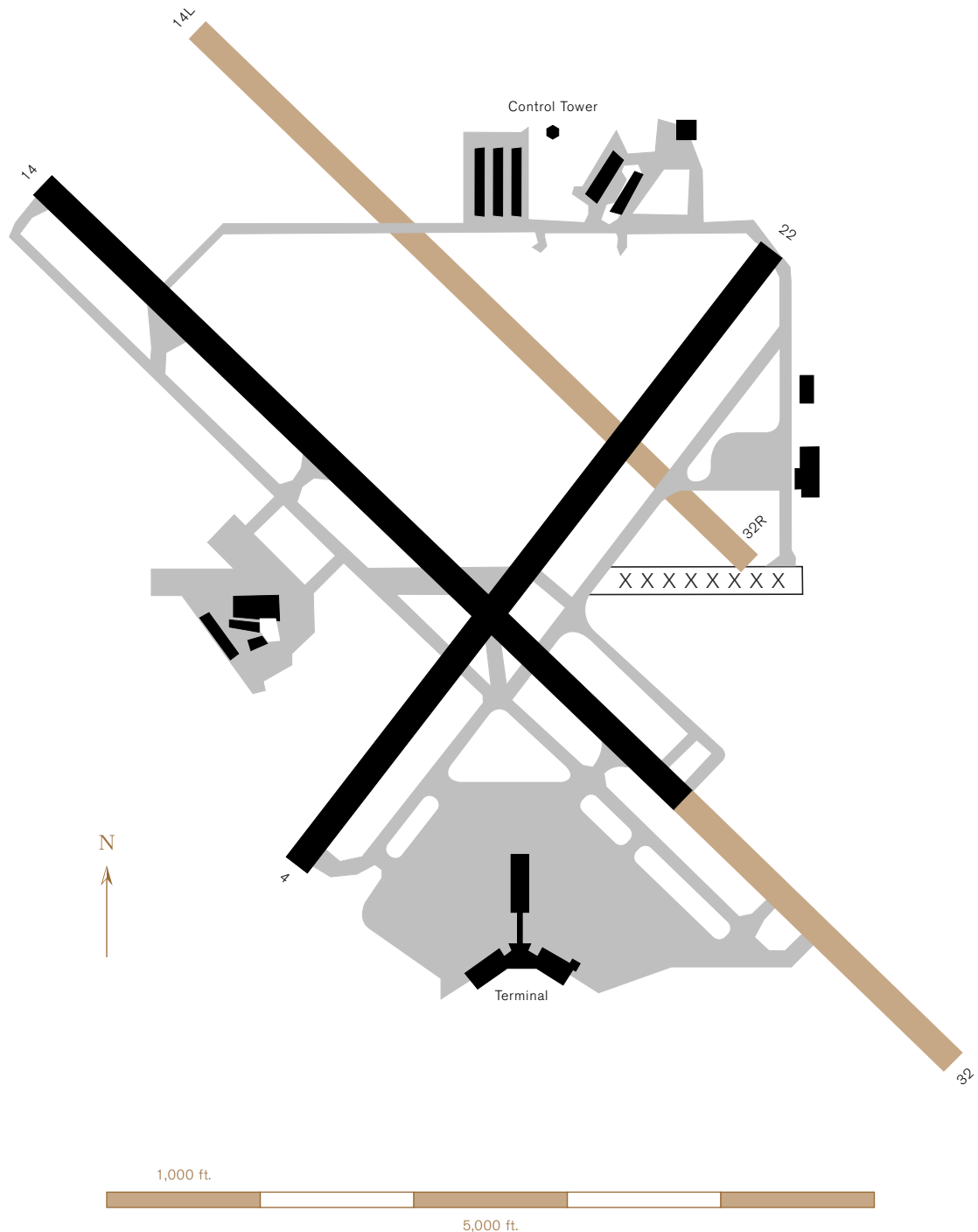


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## SRQ — SARASOTA BRADENTON AIRPORT

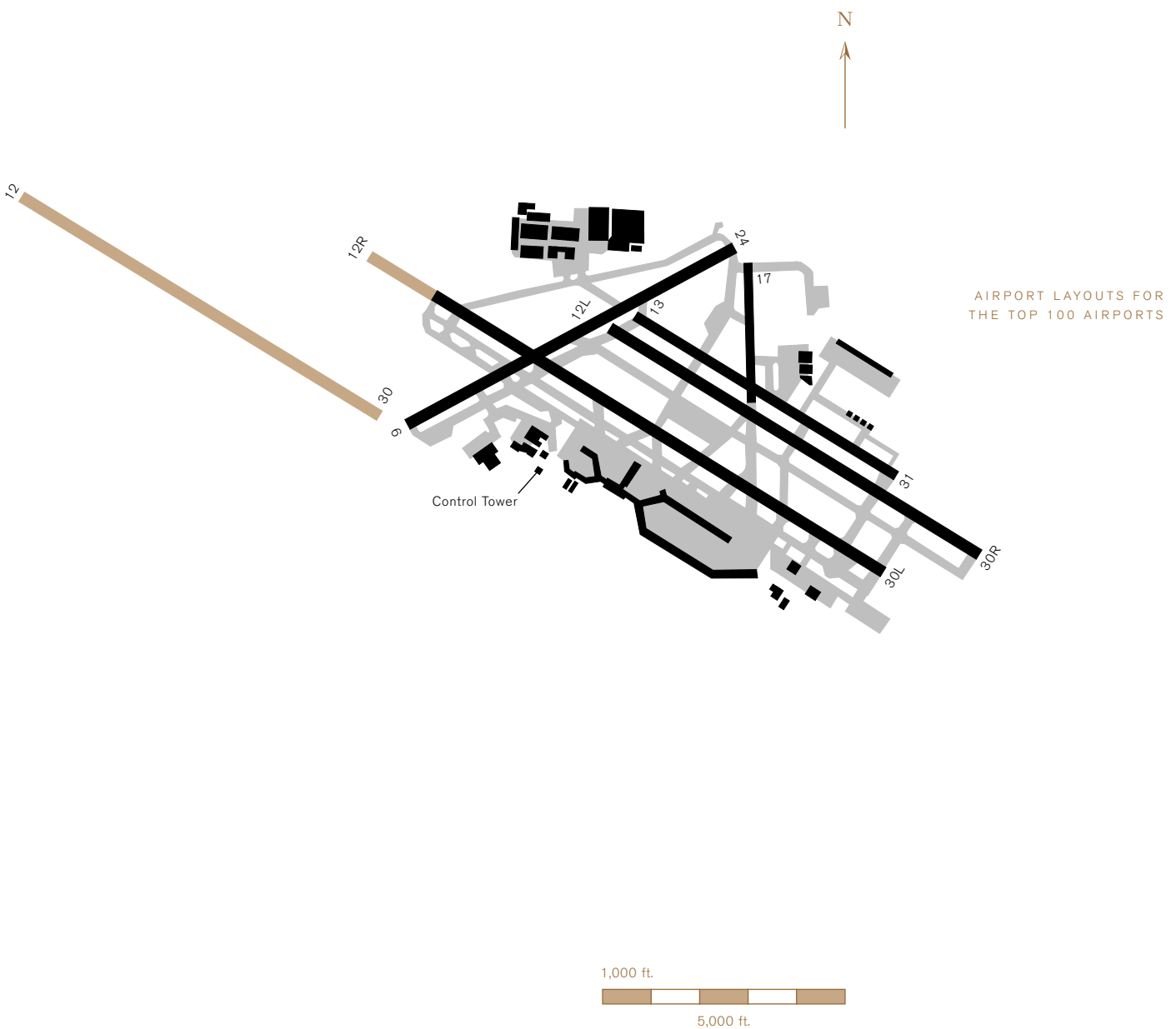
A new parallel Runway 14L/32R, 1,230 ft. northwest of Runway 14/32, is being planned at an estimated cost of \$10 million. It is expected to be operational beyond 2004. IFR arrivals and departures on the new runway will be dependent on Runway 14/32 operations. In addition, an extension of the existing Runway 14/32 is planned at a cost of \$5.1 million. It is expected to be operational beyond 2002. The runway extension will allow departures by larger and heavier aircraft and by aircraft with longer haul-lengths.





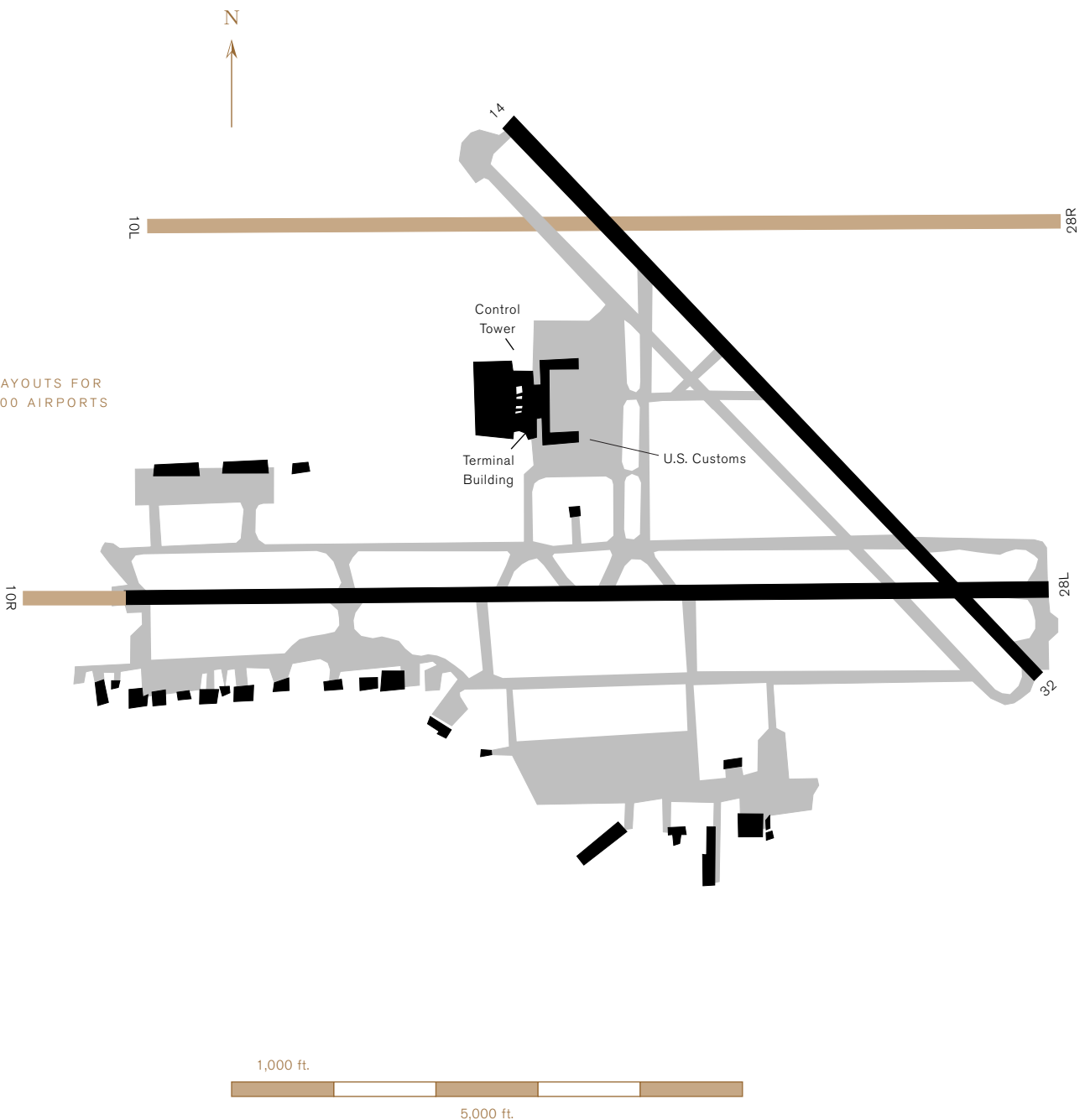
## STL — LAMBERT ST. LOUIS INTERNATIONAL AIRPORT

A new parallel Runway 12R/30L has been recommended in the St. Louis Airport Master Plan Update. The Plan calls for a parallel runway supporting independent IFR arrivals. The Final Environmental Impact Statement (FEIS) was completed in December 1997, and construction could begin in 1999. Estimated completion date is 2004.



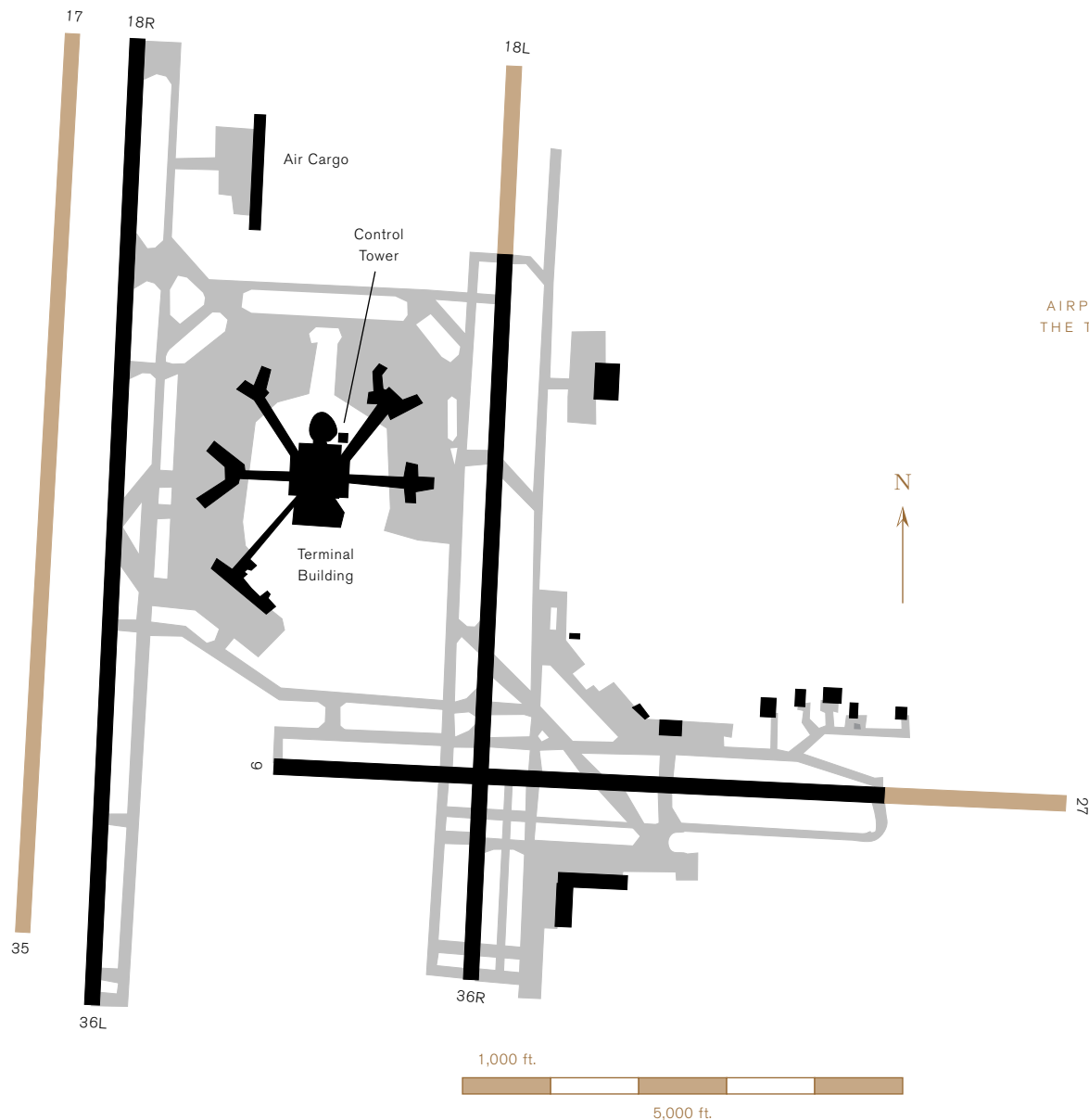
## SYR — SYRACUSE HANCOCK INTERNATIONAL AIRPORT

A new parallel Runway 10L/28R, 9,000 ft. long and separated from the existing Runway 10/28 by 3,400 ft. is being considered. It would provide independent parallel IFR operations, doubling hourly IFR arrival capacity. The cost of construction is estimated to be \$55 million for the first phase of the new runway, which would be 7,500 ft. long, including a parallel taxiway and connections to the ramp. The final length of the runway would be 9,000 ft. A capacity analysis and needs study is presently underway. Runway 10R/28L is planned to be extended 2,000 ft. to an ultimate length of 11,000 ft.



## TPA — TAMPA INTERNATIONAL AIRPORT

A third parallel Runway 17/35 is being considered for construction in 2010, with an anticipated operational date of 2012. The new CAT I/II runway will be located 700 ft. west of the centerline of existing Runway 18R/36L, and will be approximately 10,160 ft. in length. Because of its proximity to Runway 18R/36L, the new runway would be used primarily for arrivals and Runway 18R/36L would be used primarily for departures. However, during VFR conditions, it is anticipated that both runways may be used simultaneously for arrivals and/or departures in both north and south flow operations. Prior to the construction of this new runway, it is anticipated that Runway 18R will be upgraded to CAT II/III, and the associated ILS will be relocated to the new runway before it becomes operational. It is anticipated that Runway 18L will also be upgraded to CAT II/III capabilities to permit south flow landings below CAT I minimums. In addition, a 2,200-ft. northern extension of Runway 18L and a 1,200 ft. eastern extension of Runway 27 are being considered for the time frame beyond 2020.



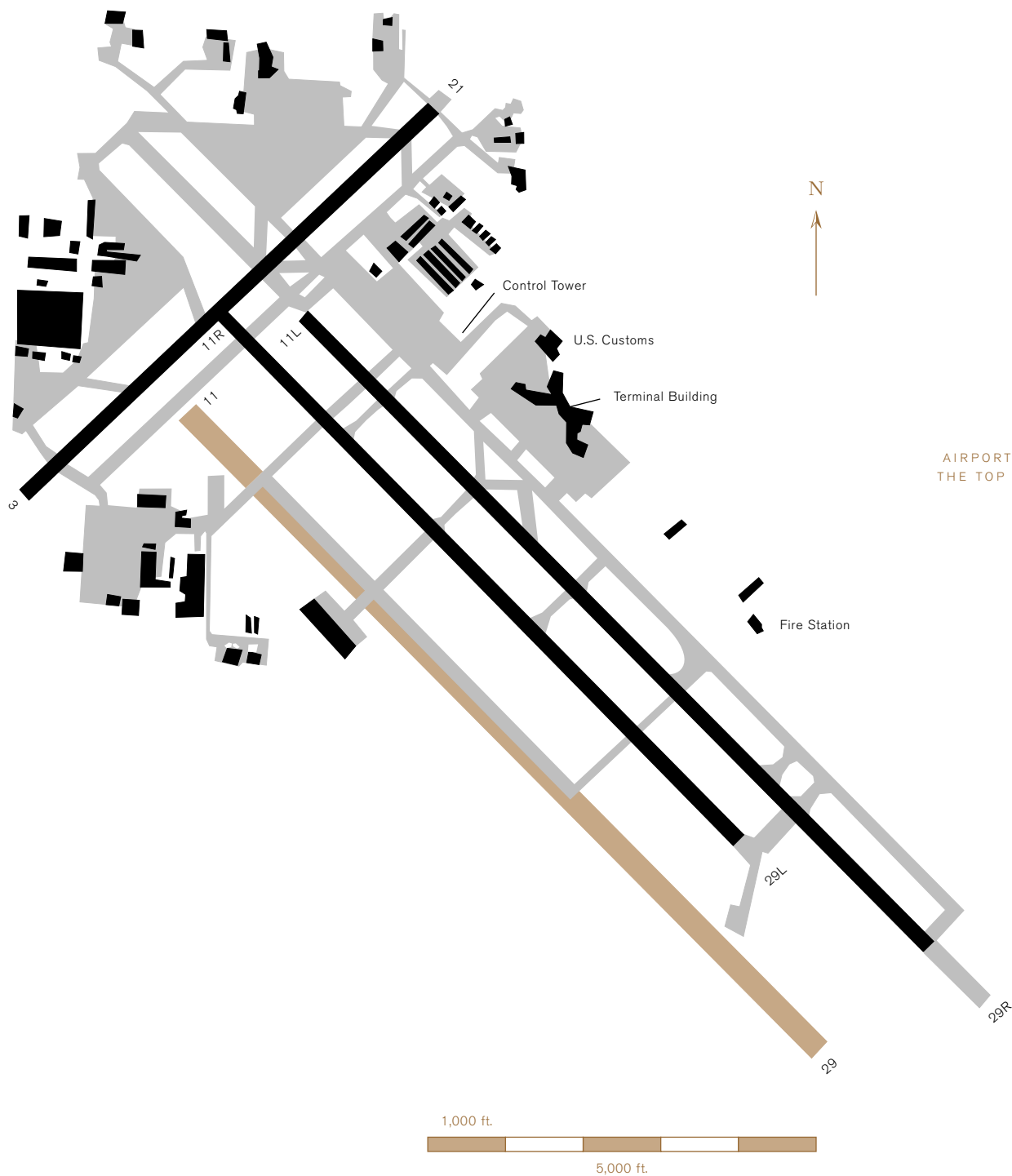
## TUL – TULSA INTERNATIONAL AIRPORT

A new parallel Runway 18/36, located 6,400 ft. east of the present 18L/36R and 9,000 ft. long, is being considered. The new runway would permit IFR triple independent approaches, if approved, to Runways 18L, 18C, and 18R.



## TUS – TUCSON INTERNATIONAL AIRPORT

An additional parallel air carrier Runway 11R/29L has been proposed. Upon completion of the new runway, the current Runway 11R/29L, a general aviation runway, will revert to its original taxiway status. Current plans call for construction to start in 2003 to be operational in 2005. The cost of construction is estimated to be \$30 million.



**TYS – KNOXVILLE MCGHEE-TYSON AIRPORT**

An extension of both runways, 5L/23R and 5R/23L, is being planned for the future.

